

# **Certificate Course**

## **On**

**Shell Programming**

07/10/2021 to 30/10/2021

Coordinators: Smt. B. Manorama Devi

Smt. V. Sudha





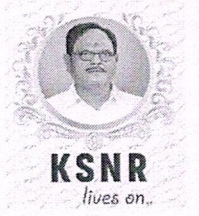
# K.S.R.M. COLLEGE OF ENGINEERING

(UGC - AUTONOMOUS)

Kadapa, Andhra Pradesh, India - 516003

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Lr./KSRMCE/ (Department of CSE)/2021-22

Date: 20/10/2021

To  
The Principal  
KSRM College of Engineering  
Kadapa, AP.

Sub: KSRMCE - (Department of CSE) – Permission to conduct certification course on Shell Programming  
- Requested – reg.

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Respected Sir,

With reference to the cited, the Department of CSE is planning to conduct certificate course on “**Shell Programming**” for B.Tech V Sem students from 07/10/2021 to 30/10/2021. So I request you to grant permission to conduct the certificate course. This is submitted for your kind perusal.

Thanking you sir,

Yours Faithfully,

*[Signature]*  
Coordinators,  
B. Manorama Devi,  
Assistant Professor,  
CSE Dept.,  
V. Sudha  
Assistant Professor,  
CSE Dept.,

*Forwarded to the principal sir,*  
*[Signature]*

Cc:

To The Director for Information

To All Deans/HODs

*Permitted*  
*V. S. S. Mm/4*



/ksrmce.ac.in

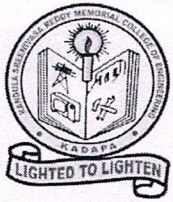
Follow Us:



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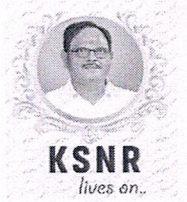


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Cr./KSRMCE/CSE/Problem Solving using Algorithms/ 2021-22

Date: 04.10.2021

## Circular

All the B. Tech V semester Students of KSRMCE are hereby informed that Department of CSE is going to conduct a certificate course on "**Shell Programming**". The course is scheduled from 07<sup>th</sup> October 2021 to 30<sup>th</sup> October 2021 in PG Block 207 (BDA Lab). The resource persons for the certificate course are Smt. B. Manorama Devi and Smt. V. Sudha, faculty of Department of CSE, KSRMCE.

In this connection, Interested B. Tech V Semester students of KSRMCE are instructed to register their names in the Department.

Coordinators:

Smt. B. Manorama Devi, Assistant professor, Dept. of CSE, KSRMCE.

Smt. V. Sudha, Assistant professor, Dept. of CSE, KSRMCE.

**HOD**

Cc to:

The Management / Director / All Deans/All HoDs/staff/ Students for Information

The IQAC Cell for Documentation





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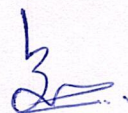



## Department of Computer Science & Engineering Certificate Course on Shell Programming Registration Form

S.No.	Roll.No.	Name of the Student	Branch	Sem	Signature
1	199Y1A0501	A. Harri Korishna	CSE	V sem	A. Harri
2	199Y1A0502	A. Pramen Kumar	CSE	V sem	A. Pramen
3	199Y1A0503	A. Lakshmi Narasimha Gumpathi	CSE	5th sem	A. Lakshmi Narasimha Gumpathi
4	199Y1A0504	A. Lalitha	CSE	V sem	A. Lalitha
5	199Y1A0505	A. Pavan Kalyan	CSE	5th sem	A. Pavan Kalyan
6	199Y1A0506	A.K. Venkata Lokesh	CSE	5th sem	A.K. Venkata Lokesh
7	199Y1A0507	A. Rakumini	CSE	V sem	A. Rakumini
8	199Y1A0508	ARAVA Janardhan Reddy	CSE	V sem	A. R. V.
9	199Y1A0509	A. Dinesh	CSE	V Sem	A. Dinesh
10	199Y1A0510	A. Likitha	CSE	V sem	A. Likitha
11	199Y1A0511	A. Mahesh Kumar	CSE	V sem	A. Mahesh
12	199Y1A0512	A.S. Jiteswar Reddy	CSE	V sem	A.S. Jiteswar
13	199Y1A0513	B. SIVA CHANDRIKA	CSE	V SEM	B. Chandrika
14	199Y1A0514	B. Adarsh	CSE	V sem	B. Adarsh
15	199Y1A0515	B. Sathish	CSE	V sem	B. Sathish
16	199Y1A0516	B. Dineswar Reddy	CSE	V sem	B. Dinesh
17	199Y1A0517	B. Sumitra	CSE	V sem	B. Sumitra
18	199Y1A0518	B. Kavya	CSE	V. Sem	B. Kavya
19	199Y1A0519	B. Sheela Latha	CSE	V Sem	B. Sheela Latha
20	199Y1A0520	B. Lakshmi Priya	CSE	V sem	B. Lakshmi Priya
21	199Y1A0521	B. Sai Suvarna Teja Reddy	CSE	V sem	B. Sai Suvarna Teja Reddy
22	199Y1A0522	B. Sai Surja Teja	CSE	V sem	B. Sai Surja Teja
23	199Y1A0523	B. Sri Nikhila	CSE	V sem	B. Sri Nikhila



24	199Y1A0524	B. Praveetika	CSE	5 <sup>th</sup> Sem	B. Praveetika
25	199Y1A0525	B. Hemalata	CSE	5 <sup>th</sup> Sem	B. Hemalata
26	199Y1A0526	B. Chaitanya	CSE	V Sem	B. Chaitanya
27	199Y1A0527	C. Renuka	CSE	V Sem	Renuka
28	199Y1A0528	C. Rahul Vardhan Naidu	CSE	V Sem	C. Rahul
29	199Y1A0529	C. Thulasi	CSE	V Sem	C. Thulasi
30	199Y1A0530	C. Jaya Sree	CSE	V Sem	C. Jaya Sree
31	199Y1A0531	C. Bhargavi	CSE	V Sem	C. Bhargavi
32	199Y1A0532	C. Sunil Kumar	CSE	V Sem	C. Sunil Kumar
33	199Y1A0533	C. Aruna	CSE	V Sem	C. Aruna
34	199Y1A0534	C. Anil Kumar Reddy	CSE	V Sem	C. Anil
35	199Y1A0535	Chowdam Sudheer Babu	CSE	5 <sup>th</sup> Sem	C. Sudheer Babu
36	199Y1A0536	C. Dhanani	CSE	V Sem	C. Dhanani
37	199Y1A0537	C.V. Hanuma Teja	CSE	V Sem	C.V. Teja
38	199Y1A0538	D. Deepika	CSE	V Sem	D. Deepika
39	199Y1A0539	D. Gowthami	CSE	V Sem	D. Gowthami
40	199Y1A0540	D. Sudarshan	CSE	V Sem	Sudarshan
41	199Y1A0541	D. HARI KRISHNA	CSE	V Sem	D. Hari Krishna
42	199Y1A0542	Dindu Kusanthi Tejonath	CSE	5 <sup>th</sup> Sem	D. Tejonath
43	199Y1A0543	D. Lingaiah	CSE	5 <sup>th</sup> Sem	D. Lingaiah

  
Coordinator(s)

  
Dr. M. HOD Nivasulu,  
M. E., Ph. D.  
Professor & HOD CSE  
K.S.R.M. College of Engineering  
KADAPA - 516 003



## **SHLL PROGRAMMING**

### **Course Overview:**

This certificate course explains the fundamental ideas behind Open Source operating system approach to programming. Knowledge of Linux helps to understand operating system level programming. This course involves kernel concepts, basic commands and shell scripting.

### **Course Objectives:**

1. To teach principles of operating system including file handling utilities, security by file permissions, disk utilities, process utilities, networking commands, filter commands.
2. To familiarize fundamentals of the shell, shell programming, pipes, input and output redirections, expressions, control structures, functions, loops, and debugging shell scripts.

### **Course Outcomes:**

1. Ability to use various Linux Commands that are used to manipulate system operations.
2. Ability to write shell programming using Linux commands.
3. Ability to write shell scripts (shell programming) using functions, control statements and loops.

### **Module I:**

Introduction to Linux Operating System: A brief history of Linux, architecture of Linux, Applications of Linux, survey of major distributions and system access.

### **Module II:**

Linux Commands: Command syntax, who, whoami

Linux Directory Commands: pwd, mkdir, rmdir, ls, cd.

Linux File and File content Commands: touch, cat, rm, cp, mv, rename, head, tail, tac, more, and less.

Linux User Commands: su, id, usradd, passwd, groupadd.

### **Module III:**

Linux Filter Commands: cat, cut, grep, comm, sed, tee, tr, uniq, wc, od, sort, gzip, gunzip.

Linux Utility Commands: find, locate, fate, cal, sleep, time, zcat, df, mount, exit, clear, link, unlink, alias, unalias.

Linux Network Commands: ip, ssh, mail, ping, host.

### **Module IV:**

Basic shell concept, types of shells, the shell as programming language, shell scripting, vi/vm editor, setup executable permissions, example shell scripts using shell commands, shell variables, user defined shell variables, shell arithmetic, the read statement, control structures: if, nested if-else-fi, the case statement.

### **Module V:**

Functions, loops in shell scripts: for, while, until, break, continue, passing arguments to scripts, pipes.



**Text Books:**

1. Beginning Linux Programming, 4th Edition, N. Matthew, R.Stones, Wrox, Wiley India Edition.
2. Shell Scripting, S.Parker, Wiley India Pvt. Ltd.
3. Unix and Shell Programming, B.A.Forouzan&R.F.Gilberg,Cengage Learning
4. Linux System Programming, Robert Love, O'Reily, SPD.

**Web References:**

1. [www.advancedlinuxprogramming.com](http://www.advancedlinuxprogramming.com)
2. [www.tldp.org](http://www.tldp.org)
3. [www.gnu.org](http://www.gnu.org)
4. [www.kernel.org](http://www.kernel.org)
5. [www.linuxsecurity.com](http://www.linuxsecurity.com)
6. <https://nptel.ac.in/courses/117/106/117106113/>



Dr. M. Sreenivasulu,

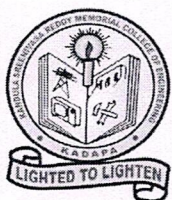
M. E., Ph. D.

Professor & HOD CSE

K.S.R.M. College of Engineering

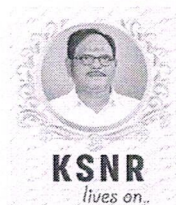
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## Department of Computer Science & Engineering


### Certificate Course on Shell Programming


#### Schedule

S.No	Date	Time	Faculty	Topic
1	07/10/2021	9:00AM-4:00PM	Smt.B.Manorama Devi, Smt.V.Sudha & Sri.Md.Rahamathulla	Inauguration, Introduction to Linux Operating System, Basic Linux Commands, Linux directory commands, Linux file commands and file content commands, Linux user commands
2	08/10/2021	9:00AM-4:00PM	Smt.V.Sudha	Linux filter commands, Introduction to shell programming: basic shell concept, types of shells, vi editor, setup execution permissions, example scripts, execute script.
3	11/10/2021	9:00AM-4:00PM	Smt.V.Sudha	Shell variables, user defined variables, read statement, shell arithmetic, expressions
4	12/10/2021	9:00AM-4:00PM	Smt.V.Sudha	Arithmetic expressions, practical's
5	13/10/2021	4:00PM - 5:00PM	Smt.V.Sudha	Control structures, Loops: for, while and until, break, continue,
6	21/10/2021	4:00PM - 5:00PM	Smt.V.Sudha	Case statement, Practical's
7	22/10/2021	4:00PM - 5:00PM	Sri.Md.Rahamathulla	Functions
8	23/10/2021	4:00PM - 5:00PM	Sri.Md.Rahamathulla	Practical's
9	25/10/2021	4:00PM - 5:00PM	Sri.Md.Rahamathulla	Passing arguments to scripts
10	26/10/2021	4:00PM - 5:00PM	Sri.Md.Rahamathulla	Practical's
11	27/10/2021	4:00PM -	Smt.B.Manorama Devi	, pipes



		5:00PM		
12	28/10/2021	4:00PM - 5:00PM	Smt.B.Manorama Devi	Practical's
13	29/10/2021	4:00PM - 5:00PM	Smt.B.Manorama Devi, Smt.V.Sudha & Sri.Md.Rahamathulla	Exam
14	30/10/2021	4:00PM - 5:00PM	Smt.B.Manorama Devi, Smt.V.Sudha & Sri.Md.Rahamathulla	certificate distribution

  
Coordinator(s)

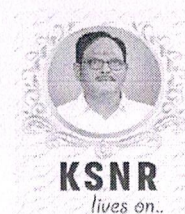
  
**HOD**  
Dr. M. Sreenivasulu,  
M. E., Ph. D.  
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## Department of Computer Science & Engineering

### Certificate Course on Shell Programming

#### Attendance Sheet


S. No	Roll Num	Name of the Student	07/10/2021		08/10/2021		11/10/2021		12/10/2021		13/10/2021	21/10/2021	22/10/2021	23/10/2021	25/10/2021	26/10/2021	27/10/2021	28/10/2021	29/10/2021	30/10/2021
			FN	AN	FN	AN	FN	AN	FN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN	AN
1	199Y1A0501	ADEMMAGARI HARI KRISHNA	P	P	P	A	P	P	P	P	A	A	P	P	P	P	P	P	A	P
2	199Y1A0502	AKULA PRAVEENKUMAR	P	P	P	P	P	A	P	P	P	P	P	A	P	P	P	P	P	P
3	199Y1A0503	ALURI LAKSHMI NARASIMHA GANAPATHI	P	P	P	P	P	P	A	P	P	P	P	P	P	P	P	P	P	P
4	199Y1A0504	ALURU LALITHA	P	P	P	P	P	P	P	P	A	P	A	P	P	P	P	P	P	P
5	199Y1A0505	AMANCHI PAWAN KALYAN	P	P	P	P	P	P	P	A	P	P	P	A	P	P	P	P	P	P
6	199Y1A0506	ANDE CHINNA KONDAIAHGARI VENKATA LOKESH	P	P	P	A	P	P	P	P	P	P	P	P	A	P	P	P	A	P
7	199Y1A0507	ANNEM RUKUMINI	P	P	P	P	P	A	P	P	P	A	P	P	P	P	P	P	P	P




8	199Y1A0508	ARAVA JANARDHAN REDDY	P	P	P	P	P	P	A	P	P	P	A	P	P	P	P	P	P
9	199Y1A0509	AVULA DINESH	P	P	P	P	P	A	P	P	P	P	P	A	P	P	A	P	P
10	199Y1A0510	AVULA LIKHITHA	P	P	P	P	P	P	P	A	A	P	P	P	P	P	P	P	P
11	199Y1A0511	AVULA MAHESH KUMAR	P	P	P	P	P	P	A	P	P	P	A	P	P	P	P	A	P
12	199Y1A0512	AVULA SHESHAGALLA JITESWAR REDDY	P	P	P	P	A	P	P	P	P	P	P	P	A	P	P	P	P
13	199Y1A0513	BADRI SIVA CHANDRIKA	P	P	P	P	P	P	P	P	A	P	A	P	P	P	P	P	P
14	199Y1A0514	BALINENI ADARSH	P	P	P	P	P	A	P	P	P	P	P	A	P	A	P	P	P
15	199Y1A0515	BANDAPALLI SATISH	P	P	P	A	P	P	P	A	P	P	P	P	P	P	P	A	P
16	199Y1A0516	BANDARLA DINESWAR REDDY	P	P	P	P	P	P	A	P	P	P	P	P	A	P	P	P	P
17	199Y1A0517	BANDARU SUMITHRA	P	P	P	P	P	P	P	P	P	P	P	A	P	P	A	P	P
18	199Y1A0518	BANKA KAVYA	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
19	199Y1A0519	BHARADWAJA SNEHA LATHA	P	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P
20	199Y1A0520	BIJIVEMULA LAKSHMI PRIYA	P	P	P	P	P	A	P	P	A	P	P	P	P	P	P	P	P
21	199Y1A0521	BOMMEPALLI SAI SURYA TEJA REDDY	P	P	P	P	A	P	P	P	P	P	A	P	P	A	P	P	P
22	199Y1A0522	BORANAPU ANUSHA	P	P	P	P	P	A	P	P	P	A	P	P	P	P	P	P	P
23	199Y1A0523	BUGGANA SRINIKHILA	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	A	P
24	199Y1A0524	BUJAGANI PRAVALLIKA	P	P	P	A	P	P	P	P	P	P	P	A	P	P	P	P	P
25	199Y1A0525	BUKKAPATNAM HEMASAI	P	P	P	P	P	P	A	P	P	P	P	P	P	P	A	P	P
26	199Y1A0526	BUSAGANI CHAITHANYA	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
27	199Y1A0527	CHALAMALA RENUKA	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P	P



28	199Y1A0528	CHALLA RAHUL VARDHAN NAIDU	P	P	P	A	P	P	P	P	P	A	P	P	P	P	A	P	P	P
29	199Y1A0529	CHANDRA THULASI	P	P	P	P	P	P	A	P	P	P	A	P	P	P	P	P	P	P
30	199Y1A0530	CHEEMALAPENTA JAYASREE	P	P	P	P	P	A	P	P	P	A	P	P	P	P	P	P	A	P
31	199Y1A0531	CHEMIKALA BHARGAVI	P	P	P	P	P	P	A	P	P	P	A	P	P	P	P	P	A	P
32	199Y1A0532	CHILAKALA SUNIL KUMAR	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	A	P	P
33	199Y1A0533	CHINTHALAPALLI ARUNA	P	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P
34	199Y1A0534	CHIRRAREDDYGARI ANIL KUMAR REDDY	P	P	P	P	A	P	P	P	P	P	P	A	P	P	P	P	P	P
35	199Y1A0535	CHOWDAM SUDHEER BABU	P	P	P	A	P	P	P	P	P	A	P	P	A	P	P	P	P	P
36	199Y1A0536	CHUKKALURI DHARANI	P	P	P	P	P	A	P	P	P	A	P	P	P	P	P	P	P	P
37	199Y1A0537	DAGGUPATI VENKATA HANUMA TEJA	P	P	P	P	P	P	P	P	A	P	P	A	P	P	P	P	P	P
38	199Y1A0538	DANDU DEEPIKA	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
39	199Y1A0539	DASARI GOWTHAMI	P	P	P	P	P	P	P	P	P	A	P	P	P	P	A	P	P	P
40	199Y1A0540	DASARI SUDHARSHAN	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
41	199Y1A0541	DHARMAPURI HARI KISHAN	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
42	199Y1A0542	DINDU KURTHI TEJONATH	P	P	P	P	A	P	P	P	P	P	P	P	P	P	P	P	A	P
43	199Y1A0543	DODDI LINGAIAH	P	P	P	A	P	P	P	P	P	P	A	P	P	P	P	P	P	P

  
Coordinator

  
Dr. M. Sreenivasulu,  
HOD  
M. E., Ph. D.  
Professor & HOD CSE  
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KSNR

*lives on.*

## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

### CERTIFICATION COURSE ON SHELL PROGRAMMING

#### RESOURCE PERSONS:

SMT. B.MANORAMA DEVI

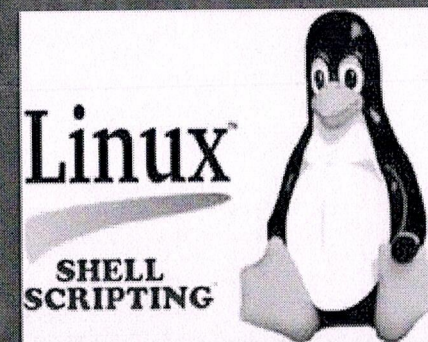
SMT.V.SUDHA

SRI.MD.RAHAMATHULLA

#### CO-ORDINATORS :

SMT.B.MANORAMA DEVI

SMT.V.SUDHA



### DATES OF EVENTS: 7/10/21 TO 30/10/21

Dr. M. Sreenivasulu  
HOD CSE

DR. V.S.S. MURTHY  
(Principal)

PROF. A. MOHAN  
(Director)

Dr. Kandala Chandra Obul Reddy  
(Managing Director)

SMT. K. RAJESWARI  
(Correspondent, Secretary, Treasurer)

SRI K. MADAN MOHAN REDDY  
(Vice- chairman)

SRI. K. RAJA MOHAN REDDY  
(Chairman)



Ksrmceofficial

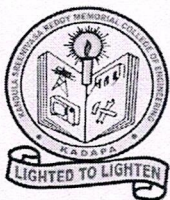


[www.ksrmce.ac.in](http://www.ksrmce.ac.in)



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## ACTIVITY REPORT

Certification Course

On

***“SHELL PROGRAMMING”***

7<sup>th</sup> October, 2021 to 30<sup>th</sup> October, 2021

Target Group : Students

Details of Participants : 43 Students

Co-coordinators : Smt.B.Manorama Devi  
Asst. Prof, Dept. of CSE

Smt. V. Sudha  
Asst. Prof, Dept. of CSE

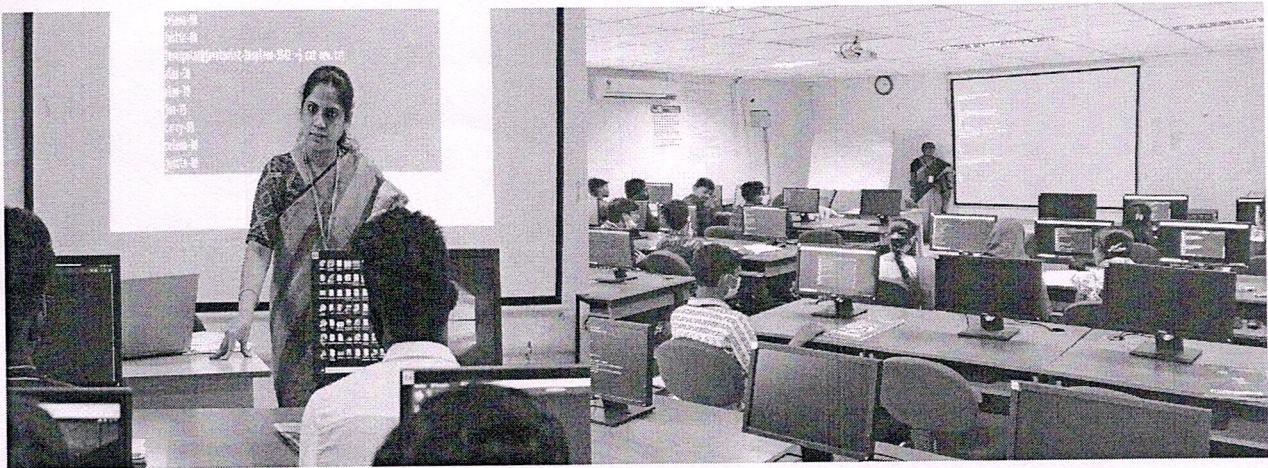
Organizing Department : Department of Computer Science & Engineering


Venue :BDA Lab(PG-207)

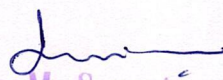
**Description:** Certification course on “SHELL PROGRAMMING” was organized by Dept. of CSE from 7<sup>th</sup> October 2021 to 12<sup>th</sup> October 2021 at PG-207. Smt. B. Manorama Devi & Smt. V. Sudha acted as Course coordinators and resource persons. The main aim of the course is to create awareness among students on the fundamental ideas behind Open Source operating system approach to programming. Knowledge of Linux helps to understand operating system level programming. This course involves kernel concepts, basic commands and shell scripting. Thirty Hours course was successfully completed and participation certificates were provided to the participants.



**Photos :**



  
**Coordinator**

  
**Dr. M. Sreenivasulu,**  
**HOD**  
M. E., Ph. D.  
Professor & HOD CSE  
K.S.R.M. College of Engineering  
KADAPA - 516 003





# K.S.R.M. COLLEGE OF ENGINEERING

(UGC - Autonomous)

Kadapa, Andhra Pradesh, India- 516 003

Approved by AICTE, New Delhi & Affiliated to JNTUA, Ananthapuramu.



**KSNR**

*lives on..*

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

## CERTIFICATE OF PARTICIPATION

This is to certify that Mr/Miss. Dr. B. S. S. Murthy  
bearing Roll Number. 1201A05007 participated in a  
certification course on "**Shell Programming**" organized by  
department of Computer Science and Engineering from  
07-10-2021 to 30-10-2021.

COORDINATOR(S)

HOD

PRINCIPAL





# K.S.R.M. COLLEGE OF ENGINEERING

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DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

## CERTIFICATE OF PARTICIPATION

This is to certify that Mr/Miss. A. Praveen Kumar  
bearing Roll Number. 199X/A0502 participated in a  
certification course on "**Shell Programming**" organized by  
department of Computer Science and Engineering from  
07-10-2021 to 30-10-2021.

COORDINATOR(S)

HOD

PRINCIPAL





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DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

## CERTIFICATE OF PARTICIPATION

This is to certify that Mr/Miss. Banka Kavya  
bearing Roll Number. 199X/A0518 participated in a  
certification course on "**Shell Programming**" organized by  
department of Computer Science and Engineering from  
07-10-2021 to 30-10-2021.

COORDINATOR(S)

HOD

PRINCIPAL





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lives on.

## DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

### CERTIFICATE OF PARTICIPATION

This is to certify that Mr/Miss. D. Lingaiah  
bearing Roll Number. 199X/A0504-3 participated in a  
certification course on "**Shell Programming**" organized by  
department of Computer Science and Engineering from  
07-10-2021 to 30-10-2021.

COORDINATOR(S)

HOD

PRINCIPAL



# Feedback form on Certificate Course

Shell Programming (07/10/2021 to 30/10/2021)

\* Required

1. Roll Number \*

---

2. Name of the Student \*

---

3. B.Tech Semester \*

*Mark only one oval.*

☐ I Sem

☐ II Sem

☐ III Sem

☐ IV Sem

☐ V Sem

☐ VI Sem

☐ VII Sem

☐ VIII Sem



4. Brhch \*

*Mark only one oval.*

- ☐ Civil Engineering
- ☐ EEE
- ☐ ME
- ☐ ECE
- ☐ CSE
- ☐ AI&ML

5. Email ID \*

---

6. Is the course content met your expectation. \*

*Mark only one oval.*

- ☐ Yes
- ☐ No

7. Is the lecture sequence well planned? \*

*Mark only one oval.*

- ☐ Yes
- ☐ No

8. The contents of the course are explained with examples. \*

*Mark only one oval.*

- ☐ Agree
- ☐ Moderate
- ☐ strongly agree



9. Is the level of course high. \*

*Mark only one oval.*

- ☐ Agree  
☐ Moderate  
☐ strongly agree

10. Is the course exposed you to the new knowledge and practice. \*

*Mark only one oval.*

- ☐ Agree  
☐ Moderate  
☐ strongly agree

11. Is the lecture clear and easy to understand? \*

*Mark only one oval.*

- ☐ 1  
☐ 2  
☐ 3  
☐ 4  
☐ 5

12. Rate the value of the course increasing your skills. \*

*Mark only one oval.*

- ☐ 1  
☐ 2  
☐ 3  
☐ 4  
☐ 5

Note: 1. Below average    2. Average    3. Good    4. Very Good    5. Excellent



13. Any Issues

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Google Forms



# K.S.R.M. COLLEGE OF ENGINEERING

(UGC - AUTONOMOUS)

Kadapa, Andhra Pradesh, India - 516003

Approved by AICTE, New Delhi & Affiliated to JNTUA, Ananthapuramu.

Department of Computer Science & Engineering

feedback form on shell programming.




S.No.	Email address	Name of the student	Year & Semester	Branch	Roll Num	Is the course content met your expectation	Is the lecture sequence well planned	The contents of the course is explained with examples	Is the level of course high	Is the course exposed you to the new knowledge and practices	Is the lecturer clear and easy to understand	Rate the value of course in increasing your skills	Any issues
1	199Y1A0501@ksrmce	ADEMMAGARI HARI	B.Tech v sem	CSE	199Y1A0501	Yes	Yes	Agree	Agree	Strongly agree	4	5	Nothing
2	199Y1A0502@ksrmce	AKULA	B.Tech v sem	CSE	199Y1A0502	Yes	Yes	Agree	Agree	Strongly agree	5	5	Nothing
3	199Y1A0503@ksrmce	ALURI LAKSHMI	B.Tech v sem	CSE	199Y1A0503	Yes	Yes	Agree	Agree	Strongly agree	4	5	Good
4	199Y1A0504@ksrmce	ALURU LALITHA (W)	B.Tech v sem	CSE	199Y1A0504	Yes	Yes	Agree	Agree	Strongly agree	5	5	nothing
5	199Y1A0505@ksrmce	AMANCHI PAWAN	B.Tech v sem	CSE	199Y1A0505	Yes	Yes	Agree	Agree	Strongly agree	5	5	Good
6	199Y1A0506@ksrmce	ANDE CHINNA	B.Tech v sem	CSE	199Y1A0506	Yes	Yes	Agree	Agree	Strongly agree	4	5	very
7	199Y1A0507@ksrmce	ANNEM RUKUMINI (W)	B.Tech v sem	CSE	199Y1A0507	Yes	Yes	Strongly agree	Agree	Strongly agree	4	3	Nothing
8	199Y1A0508@ksrmce	ARAVA JANARDHAN	B.Tech v sem	CSE	199Y1A0508	Yes	Yes	agree	Agree	Strongly agree	4	4	no
9	199Y1A0509@ksrmce	AVULA DINESH	B.Tech v sem	CSE	199Y1A0509	Yes	Yes	Strongly agree	Agree	Strongly agree	5	5	Nothing
10	199Y1A0510@ksrmce	AVULA LIKHITHA (W)	B.Tech v sem	CSE	199Y1A0510	Yes	Yes	Strongly agree	Agree	Strongly agree	5	5	Good
11	199Y1A0511@ksrmce	AVULA MAHESH	B.Tech v sem	CSE	199Y1A0511	Yes	Yes	Agree	Agree	Strongly agree	5	4	Good
12	199Y1A0512@ksrmce	AVULA SHESHAGALLA	B.Tech v sem	CSE	199Y1A0512	Yes	Yes	agree	Agree	Strongly agree	5	5	Good
13	199Y1A0513@ksrmce	BADRI SIVA	B.Tech v sem	CSE	199Y1A0513	Yes	Yes	agree	Agree	Strongly agree	3	5	Good
14	199Y1A0514@ksrmce	BALINENI ADARSH	B.Tech v sem	CSE	199Y1A0514	Yes	Yes	agree	Agree	Strongly agree	5	4	very
15	199Y1A0515@ksrmce	BANDAPALLI SATISH	B.Tech v sem	CSE	199Y1A0515	Yes	Yes	agree	Agree	Strongly agree	4	4	very
16	199Y1A0516@ksrmce	BANDARLA DINESWAR	B.Tech v sem	CSE	199Y1A0516	Yes	Yes	agree	Agree	Strongly agree	5	4	very
17	199Y1A0517@ksrmce	BANDARU SUMITHRA	B.Tech v sem	CSE	199Y1A0517	Yes	Yes	agree	Agree	Strongly agree	3	5	no
18	199Y1A0518@ksrmce	BANKA KAVYA (W)	B.Tech v sem	CSE	199Y1A0518	Yes	Yes	agree	Agree	Strongly agree	4	5	nithing
19	199Y1A0519@ksrmce	BHARADWAJA SNEHA	B.Tech v sem	CSE	199Y1A0519	Yes	Yes	Strongly agree	Agree	Strongly agree	4	5	Good
20	199Y1A0520@ksrmce	BIJIVEMULA LAKSHMI	B.Tech v sem	CSE	199Y1A0520	Yes	Yes	Strongly agree	Agree	Strongly agree	4	4	Good
21	199Y1A0521@ksrmce	BOMMEPALLI SAI	B.Tech v sem	CSE	199Y1A0521	Yes	Yes	Strongly agree	Agree	Strongly agree	4	3	Good
22	199Y1A0522@ksrmce	BORANAPU ANUSHA	B.Tech v sem	CSE	199Y1A0522	Yes	Yes	agree	Agree	Strongly agree	4	4	Good
23	199Y1A0523@ksrmce	BUGGANA SRINIKHILA	B.Tech v sem	CSE	199Y1A0523	Yes	Yes	agree	Agree	Strongly agree	5	4	Good
24	199Y1A0524@ksrmce	BUJAGANI PRAVALLIKA	B.Tech v sem	CSE	199Y1A0524	Yes	Yes	Strongly agree	Agree	Strongly agree	5	4	Good
25	199Y1A0525@ksrmce	BUKKAPATNAM	B.Tech v sem	CSE	199Y1A0525	Yes	Yes	agree	Agree	Strongly agree	5	5	Good
26	199Y1A0526@ksrmce	BUSAGANI	B.Tech v sem	CSE	199Y1A0526	Yes	Yes	agree	Agree	Strongly agree	5	5	Nothing
27	199Y1A0527@ksrmce	CHALAMALA RENUKA	B.Tech v sem	CSE	199Y1A0527	Yes	Yes	agree	Agree	Strongly agree	5	5	no
28	199Y1A0528@ksrmce	CHALLA RAHUL	B.Tech v sem	CSE	199Y1A0528	Yes	Yes	agree	Agree	Strongly agree	3	4	no
29	199Y1A0529@ksrmce	CHANDRA THULASI (W)	B.Tech v sem	CSE	199Y1A0529	Yes	Yes	Strongly agree	Agree	Strongly agree	3	4	no
30	199Y1A0530@ksrmce	CHEEMALAPENTA	B.Tech v sem	CSE	199Y1A0530	Yes	Yes	Strongly agree	Agree	Strongly agree		5	no
31	199Y1A0531@ksrmce	CHEMIKALA BHARGAVI	B.Tech v sem	CSE	199Y1A0531	Yes	Yes	Strongly agree	Agree	Strongly agree	5	4	nothing
32	199Y1A0532@ksrmce	CHILAKALA SUNIL	B.Tech v sem	CSE	199Y1A0532	Yes	Yes	agree	Agree	Strongly agree	5	5	Nothing



33	199Y1A0533@ksrmce	CHINTHALAPALLI	B.Tech v sem	CSE	199Y1A0533	Yes	Yes	agree	Agree	Strongly agree	5	4	no
34	199Y1A0534@ksrmce	CHIRREDDYGARI	B.Tech v sem	CSE	199Y1A0534	Yes	Yes	agree	Agree	Strongly agree	5	4	Nothing
35	199Y1A0535@ksrmce	CHOWDAM SUDHEER	B.Tech v sem	CSE	199Y1A0535	Yes	Yes	agree	Agree	Strongly agree	5	4	Good
36	199Y1A0536@ksrmce	CHUKKALURI DHARANI	B.Tech v sem	CSE	199Y1A0536	Yes	Yes	agree	Agree	Strongly agree	5	5	Good
37	199Y1A0537@ksrmce	DAGGUPATI VENKATA	B.Tech v sem	CSE	199Y1A0537	Yes	Yes	agree	Agree	Strongly agree	5	5	Good
38	199Y1A0538@ksrmce	DANDU DEEPIKA (W)	B.Tech v sem	CSE	199Y1A0538	Yes	Yes	Strongly agree	Agree	Strongly agree	5	5	Good
39	199Y1A0539@ksrmce	DASARI GOWTHAMI	B.Tech v sem	CSE	199Y1A0539	Yes	Yes	Strongly agree	Agree	Strongly agree	5	5	Good
40	199Y1A0540@ksrmce	DASARI SUDHARSHAN	B.Tech v sem	CSE	199Y1A0540	Yes	Yes	Strongly agree	Agree	Strongly agree	5	5	Good
41	199Y1A0541@ksrmce	DHARMAPURI HARI	B.Tech v sem	CSE	199Y1A0541	Yes	Yes	agree	Agree	Strongly agree	4	4	Good
42	199Y1A0542@ksrmce	DINDU KURTHI	B.Tech v sem	CSE	199Y1A0542	Yes	Yes	agree	Agree	Strongly agree	4	5	Good
43	199Y1A0543@ksrmce	DODDI LINGAIAH	B.Tech v sem	CSE	199Y1A0543	Yes	Yes	agree	Agree	Strongly agree	4	5	Good

  
COORDINATOR

  
HOD

Dr. M. Sreenivasulu,  
M E., Ph. D.  
Professor & HOD CSE  
K.S.R.M. College of Engineering  
KADAPA - 516 003

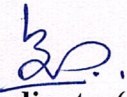



**K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA-516003**  
**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**  
**VALUE ADDED / CERTIFICATE COURSE ON**  
**SHELL PROGRAMMING FROM 07/10/2021 TO 30/10/2021**  
**AWARD LIST**

S.No	Roll Number	Name of the Student	Marks Obtained
1	199Y1A0501	Ademmagari Hari Krishna	10
2	199Y1A0502	Akula Praveenkumar	18
3	199Y1A0503	Aluri Lakshmi Narasimha Ganapathi	17
4	199Y1A0504	Aluru Lalitha	16
5	199Y1A0505	Amanchi Pawan Kalyan	19
6	199Y1A0506	A.Venkata Lokesh	18
7	199Y1A0507	Annem Rukumini	17
8	199Y1A0508	Arava Janardhan Reddy	16
9	199Y1A0509	Avula Dinesh	18
10	199Y1A0510	Avula Likhitha	17
11	199Y1A0511	Avula Mahesh Kumar	19
12	199Y1A0512	Avula Sheshagalla Jiteswar Reddy	18
13	199Y1A0513	Badri Siva Chandrika	09
14	199Y1A0514	Balineni Adarsh	18
15	199Y1A0515	Bandapalli Satish	16
16	199Y1A0516	Bandarla Dineswar Reddy	18
17	199Y1A0517	Bandaru Sumithra	17
18	199Y1A0518	Banka Kavya	16
19	199Y1A0519	Bharadwaja Sneha Latha	12
20	199Y1A0520	Bijivemula Lakshmi Priya	17
21	199Y1A0521	Bommepalli Sai Surya Teja Reddy	18
22	199Y1A0522	Boranapu Anusha	18
23	199Y1A0523	Buggana Srinikhila	17
24	199Y1A0524	Bujagani Pravallika	19
25	199Y1A0525	Bukkapatnam Hemasai	15
26	199Y1A0526	Busagani Chaithanya	17
27	199Y1A0527	Chalamala Renuka	14
28	199Y1A0528	Challa Rahul Vardhan Naidu	18
29	199Y1A0529	Chandra Thulasi	17
30	199Y1A0530	Cheemalapenta Jayasree	19
31	199Y1A0531	Chemikala Bhargavi	17
32	199Y1A0532	Chilakala Sunil Kumar	16
33	199Y1A0533	Chinthalapalli Aruna	17
34	199Y1A0534	Chirrareddygar Anil Kumar Reddy	15
35	199Y1A0535	Chowdam Sudheer Babu	18
36	199Y1A0536	Chukkaluri Dharani	17
37	199Y1A0537	Daggupati Venkata Hanuma Teja	16
38	199Y1A0538	Dandu Deepika	16
39	199Y1A0539	Dasari Gowthami	15
40	199Y1A0540	Dasari Sudharshan	16
41	199Y1A0541	Dharmapuri Hari Kishan	15



42	199Y1A0542	Dindu Kurthi Tejonath	16
43	199Y1A0543	Doddi Lingaiah	9

  
Coordinator(s)

X   
HoD CSE

Dr. M. Sreenivasulu,  
M. E., Ph. D.  
Professor & HOD CSE  
K. S. R. M. College of Engineering  
KADAPA - 516 003



**K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA-516003**  
**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**  
**VALUE ADDED /CERTIFICATE COURSE ON**  
**SHELL PROGRAMMING FROM 07/10/2021 TO 30/10/2021**

**ASSESSMENT TEST**

**Roll Number:** \_\_\_\_\_ **Name of the Student:** \_\_\_\_\_

**Time: 20 Min**

**(Objective Questions)**

**Max.Marks:20**

Note: Answer the following Questions and each question carries **one** mark.

1. Which of the following can be used to open a file for reading and making changes in shell programming? [      ]  
a) r+              b) w+              c) r              d) w
2. In Linux, which option of rm command is used to remove a directory with all its subdirectories? [      ]  
a) -b              b) -o              c) -p              d) -r
3. Which of the following directory contains device files? [      ]  
a) Root              b) bin              c) etc              d) dev
4. In Linux, how can you add a new user to your system? [      ]  
a) useradd              b) adduser              c) linuxconf              d) All of the above
5. \_\_\_\_\_ is a symbol used to represent special files in Linux OS. [      ]  
a) d              b) e              c) s              d) c
6. Which of the following in UNIX/LINUX remove files or directories? [      ]  
a) Ls              b) cd              c) pwd              d) rm
7. \_\_\_\_\_ searches the strings in file opened in vi editor? [      ]  
a) /              b) @              c) #              d) \$
8. Which of the following 'wildcard' character matches exactly one character? [      ]  
a) !              b) &              c) ?              d) \*
9. In vi editor if keystroke 'I' is pressed in insert mode it will \_\_\_\_\_. [      ]  
a) Inserts text to the left of the cursor  
b) Inserts text at the beginning of the cursor  
c) Inserts text to the right of the cursor  
d) From the content of the file
10. How do you print the lines between 5 and 10, both inclusive? [      ]  
a) cat filename|head|tail -6  
b) cat filename|head|tail -5  
c) cat filename |tail +5|head  
d) cat filename |tail -5|head -10



11. What is the output of the following program? [     ]  
X=3; y=3; z=10;  
If [ (%x -eq 3) -a ( \$y -eq 5 -o \$z -eq 10) ]  
then  
    echo \$x  
else  
    echo \$y  
a) 1            b) 3            c) 5            d) error
12. What is the output of the following program? [     ]  
[ -n \$HOME ]  
echo \$?  
[ -z \$HOME ]  
echo \$?  
a) 0   1        b) 1   0        c) 0   0        d) 1   1
13. In Linux, which of the following command is used to create the filesystem? [     ]  
a) fchk        b) fcsk c) daemon d) mkfs
14. The cp command uses [     ]  
a) standard output file  
b) standard input file  
b) both input and output file  
d) neither standard input nor standard output file
15. Which of the following tool is used to automate Ret Hat Linux installation? [     ]  
a) linux      b) install      c) kickstart      d) setup
16. Which of the following tool is used to boot the Linux.Kernel from a DOS file systems? [     ]  
a) Config.sys    b) Linux.bat      c) SysLinux        d) Linux.sys
17. Which of the following command is used to count the total number of lines, words, and characters contained in a file? [     ]  
a) wc           b) wcount          c) countw          d) none
18. Identify the hardware structure which is not supported by RedHat? [     ]  
a) IBM-Compatible    b) Alpha      c) SPARC      d) Macintosh
19. Among the following commands which is used vi editors to delete a single character? [     ]  
a) a            b) x            c) y            d) z
20. Choose the TCP/IP protocol which is used for remote terminal connection service? [     ]  
a) FTP          b) UDP          c) RARP        d) TELNET



10/20  
30

**K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA-516003**  
**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**  
**VALUE ADDED /CERTIFICATE COURSE ON**  
**SHELL PROGRAMMING FROM 07/10/2021 TO 30/10/2021**

**ASSESSMENT TEST**

**Roll Number:** 19941A0501 **Name of the Student:** A. HARI KRISHNA

**Time: 20 Min**

**(Objective Questions)**

**Max.Marks:20**

**Note:** Answer the following Questions and each question carries **one** mark.

1. Which of the following can be used to open a file for reading and making changes in shell programming? [ b ] ✓  
a) r+      b) w+      c) r      d) w
2. In Linux, which option of rm command is used to remove a directory with all its subdirectories? [ B ] X  
a) -b      b) -o      c) -p      d) -r
3. Which of the following directory contains device files? [ d ] ✓  
a) Root      b) bin      c) etc      d) dev
4. In Linux, how can you add a new user to your system? [ d ] ✓  
a) useradd      b) adduser      c) linuxconf      d) All of the above
5. \_\_\_\_\_ is a symbol used to represent special files in Linux OS. [ d ] ✓  
a) d      b) e      c) s      d) c
6. Which of the following in UNIX/LINUX remove files or directories? [ c ] X  
a) Ls      b) cd      c) pwd      d) rm
7. \_\_\_\_\_ searches the strings in file opened in vi editor? [ A ] X  
a) /      b) @      c) #      d) \$
8. Which of the following 'wildcard' character matches exactly one character? [ b ] X  
a) !      b) &      c) ?      d) \*
9. In vi editor if keystroke 'I' is pressed in insert mode it will \_\_\_\_\_. [ d ] ✓  
a) Inserts text to the left of the cursor  
b) Inserts text at the beginning of the cursor  
c) Inserts text to the right of the cursor  
d) From the content of the file
10. How do you print the lines between 5 and 10, both inclusive? [ a ] ✓  
a) cat filename|head|tail -6  
b) cat filename|head|tail -5  
c) cat filename |tail +5|head  
d) cat filename |tail -5|head -10



$$[c]X$$

a) 1                      b) 3                      c) 5                      d) error

[ A ]

a) 0 1      b) 1 0      c) 0 0      d) 1 1

a) fchk      b) fcsk c) daemon d) mkfs

[ d ] ✓

- a) standard output file
- b) standard input file
- b) both input and output file
- d) neither standard input nor standard output file

a) linux      b) install      c) kickstart      d) setup

[ D ] X

a) Config.sys      b) Linux.bat      c) SysLinux      d) Linux.sys

[ Q ]

a) wc      b)wcount      c)countw      d) none

a) IBM-Compatible      b) Alpha      c) SPARC      d) Macintosh

$[C]^\circ$  X

a) a                      b) x                      c) y                      d) z

[ B ] X

a) FTP      b)UDP      c)RARP      d) TELNET



16/20  
30

**K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA-516003**  
**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**  
**VALUE ADDED /CERTIFICATE COURSE ON**  
**SHELL PROGRAMMING FROM 07/10/2021 TO 30/10/2021**

**ASSESSMENT TEST**

**Roll Number:** 19941A0508

**Name of the Student:** A. Jaganathan Reddy

**Time: 20 Min**

**(Objective Questions)**

**Max.Marks:20**

**Note: Answer the following Questions and each question carries one mark.**

1. Which of the following can be used to open a file for reading and making changes in shell programming? [ b ] ✓  
a) r+      b) w+      c) r      d) w
2. In Linux, which option of rm command is used to remove a directory with all its subdirectories? [ d ] ✓  
a) -b      b) -o      c) -p      d) -r
3. Which of the following directory contains device files? [ d ] ✓  
a) Root      b) bin      c) etc      d) dev
4. In Linux, how can you add a new user to your system? [ a ] a  
a) useradd      b) adduser      c) linuxconf      d) All of the above
5. \_\_\_\_\_ is a symbol used to represent special files in Linux OS. [ d ] ✓  
a) d      b) e      c) s      d) c
6. Which of the following in UNIX/LINUX remove files or directories? [ d ] ✓  
a) Ls      b) cd      c) pwd      d) rm
7. \_\_\_\_\_ searches the strings in file opened in vi editor? [ a ] ✓  
a) /      b) @      c) #      d) \$
8. Which of the following 'wildcard' character matches exactly one character? [ c ] ✓  
a) !      b) &      c) ?      d) \*
9. In vi editor if keystroke 'I' is pressed in insert mode it will \_\_\_\_\_. [ a ] a  
a) Inserts text to the left of the cursor  
b) Inserts text at the beginning of the cursor  
c) Inserts text to the right of the cursor  
d) From the content of the file
10. How do you print the lines between 5 and 10, both inclusive? [ a ] ✓  
a) cat filename|head|tail -6  
b) cat filename|head|tail -5  
c) cat filename |tail +5|head  
d) cat filename |tail -5|head -10



11. What is the output of the following program?

$[b] \checkmark$

X=3; y=3; z=10;

If [ (%X -eq 3) -a ( \$y -eq 5 -o \$Z -eq 10) ]

then

echo \$x

else

echo \$y

- a) 1                      b) 3                      c) 5                      d) error

12. What is the output of the following program?

 $[C] \alpha$ 

[ -n \$HOME ]

echo \$?

[ -z \$HOME ]

echo \$?


- a) 0 1      b) 1 0      c) 0 0      d) 1 1

13. In Linux, which of the following command is used to create the filesystem? [ d ]

$[d]$  ✓

- a) fchk      b) fcsk c) daemon d) mkfs

14. The `cp` command uses

[  ] ✓

- a) standard output file
- b) standard input file
- b) both input and output file
- d) neither standard input nor standard output file

15. Which of the following tool is used to automate Ret Hat Linux installation? [ a ]

 $a \mid \alpha$ 

- a) linux      b) install      c) kickstart      d) setup

16. Which of the following tool is used to boot the Linux.Kernel from a DOS file systems? [ 1 ]

[ d ] ✓

- a) Config.sys      b) Linux.bat      c) SysLinux      d) Linux.sys

17. Which of the following command is used to count the total number of lines, words, and characters contained in a file? [ a ] ✓

[ a ] ✓

- a) wc      b)wcount      c)countw      d) none

18. Identify the hardware structure which is not supported by RedHat? [ 1 ]

[ d ] ✓

- a) IBM-Compatible      b) Alpha      c) SPARC      d) Macintosh

19. Among the following commands which is used vi editors to delete a single character? [ a ]

[ a ] ✓

- a) a                      b) x                      c) y                      d) z

20. Choose the TCP/IP protocol which is used for remote terminal connection service? [ d ]

[ d ] ✓

- a) FTP      b)UDP      c)RARP      d) TELNET



15/20  
30

K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA-516003  
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING  
VALUE ADDED /CERTIFICATE COURSE ON  
SHELL PROGRAMMING FROM 07/10/2021 TO 30/10/2021

ASSESSMENT TEST

Roll Number: 19941AD539 Name of the Student: D. Gowthami

Time: 20 Min

(Objective Questions)

Max.Marks:20

Note: Answer the following Questions and each question carries **one** mark.

1. Which of the following can be used to open a file for reading and making changes in shell programming? [ b ] ✓  
a) r+      b) w+      c) r      d) w
2. In Linux, which option of rm command is used to remove a directory with all its subdirectories? [ d ] ✓  
a) -b      b) -o      c) -p      d) -r
3. Which of the following directory contains device files? [ d ] ✓  
a) Root      b) bin      c) etc      d) dev
4. In Linux, how can you add a new user to your system? [ d ] ✓  
a) useradd      b) adduser      c) linuxconf      d) All of the above
5. \_\_\_\_\_ is a symbol used to represent special files in Linux OS. [ d ] ✓  
a) d      b) e      c) s      d) c
6. Which of the following in UNIX/LINUX remove files or directories? [ d ] ✓  
a) Ls      b) cd      c) pwd      d) rm
7. \_\_\_\_\_ searches the strings in file opened in vi editor? [ c ] X  
a) /      b) @      c) #      d) \$
8. Which of the following 'wildcard' character matches exactly one character? [ b ] X  
a) !      b) &      c) ?      d) \*
9. In vi editor if keystroke 'I' is pressed in insert mode it will \_\_\_\_\_. [ d ] ✓  
a) Inserts text to the left of the cursor  
b) Inserts text at the beginning of the cursor  
c) Inserts text to the right of the cursor  
d) From the content of the file
10. How do you print the lines between 5 and 10, both inclusive? [ a ] ✓  
a) cat filename|head|tail -6  
b) cat filename|head|tail -5  
c) cat filename |tail +5|head  
d) cat filename |tail -5|head -10







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30

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**SHELL PROGRAMMING FROM 07/10/2021 TO 30/10/2021**

**ASSESSMENT TEST**

**Roll Number:** 19PY1A0519 **Name of the Student:** B. Snehalatha

**Time: 20 Min**

**(Objective Questions)**

**Max.Marks:20**

**Note:** Answer the following Questions and each question carries **one** mark.

1. Which of the following can be used to open a file for reading and making changes in shell programming? [ b ] ✓  
a) r+      b) w+      c) r      d) w
2. In Linux, which option of rm command is used to remove a directory with all its subdirectories? [ d ] ✓  
a) -b      b) -o      c) -p      d) -r
3. Which of the following directory contains device files? [ d ] ✓  
a) Root      b) bin      c) etc      d) dev
4. In Linux, how can you add a new user to your system? [ c ] ✗  
a) useradd      b) adduser      c) linuxconf      d) All of the above
5. \_\_\_\_\_ is a symbol used to represent special files in Linux OS. [ c ] ✗  
a) d      b) e      c) s      d) c
6. Which of the following in UNIX/LINUX remove files or directories? [ d ] ✓  
a) Ls      b) cd      c) pwd      d) rm
7. \_\_\_\_\_ searches the strings in file opened in vi editor? [ a ] ✓  
a) /      b) @      c) #      d) \$
8. Which of the following 'wildcard' character matches exactly one character? [ c ] ✓  
a) !      b) &      c) ?      d) \*
9. In vi editor if keystroke 'I' is pressed in insert mode it will \_\_\_\_\_. [ c ] ✗  
a) Inserts text to the left of the cursor  
b) Inserts text at the beginning of the cursor  
c) Inserts text to the right of the cursor  
d) From the content of the file
10. How do you print the lines between 5 and 10, both inclusive? [ b ] ✗  
a) cat filename|head|tail -6  
b) cat filename|head|tail -5  
c) cat filename |tail +5|head  
d) cat filename |tail -5|head -10



$[a] \alpha$

If [ (%x -eq 3) -a ( \$y -eq 5 -o \$z -eq 10) ]  
then

else

a) 1                      b) 3                      c) 5                      d) error

$[a] \alpha$

echo \$?

a) 0 1      b) 1 0      c) 0 0      d) 1 1

a) fchk      b) fcsk c) daemon d) mkfs

[ d ] ✓

d) neither standard input nor standard output file

a) linux      b) install      c) kickstart      d) setup

 $[b]d$ 

a) Config.sys      b) Linux.bat      c) SysLinux      d) Linux.sys

[ a ] ✓

a) wc      b)wcount      c)countw      d) none

a) IBM-Compatible      b) Alpha      c) SPARC      d) Macintosh

[ a ] ✓

a) a                      b) x                      c) y                      d) z

$$[C] \alpha$$

a) FTP      b) UDP      c) RARP      d) TELNET



15/20  
30

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SHELL PROGRAMMING FROM 07/10/2021 TO 30/10/2021

ASSESSMENT TEST

Roll Number: 1994H0534 Name of the Student: C. Anil Kumar Reddy

Time: 20 Min

(Objective Questions)

Max.Marks:20

Note: Answer the following Questions and each question carries **one** mark.

1. Which of the following can be used to open a file for reading and making changes in shell programming? [ b ] ✓  
a) r+      b) w+      c) r      d) w
2. In Linux, which option of rm command is used to remove a directory with all its subdirectories? [ d ] ✓  
a) -b      b) -o      c) -p      d) -r
3. Which of the following directory contains device files? [ d ] ✓  
a) Root      b) bin      c) etc      d) dev
4. In Linux, how can you add a new user to your system? [ d ] ✓  
a) useradd      b) adduser      c) linuxconf      d) All of the above
5. \_\_\_\_\_ is a symbol used to represent special files in Linux OS. [ c ] ✗  
a) d      b) e      c) s      d) c
6. Which of the following in UNIX/LINUX remove files or directories? [ d ] ✓  
a) Ls      b) cd      c) pwd      d) rm
7. \_\_\_\_\_ searches the strings in file opened in vi editor? [ c ] ✗  
a) /      b) @      c) #      d) \$
8. Which of the following 'wildcard' character matches exactly one character? [ c ] ✓  
a) !      b) &      c) ?      d) \*
9. In vi editor if keystroke 'I' is pressed in insert mode it will \_\_\_\_\_. [ d ] ✓  
a) Inserts text to the left of the cursor  
b) Inserts text at the beginning of the cursor  
c) Inserts text to the right of the cursor  
d) From the content of the file
10. How do you print the lines between 5 and 10, both inclusive? [ a ] ✓  
a) cat filename|head|tail -6  
b) cat filename|head|tail -5  
c) cat filename |tail +5|head  
d) cat filename |tail -5|head -10



11. What is the output of the following program?

[ b ] ✓

```
X=3; y=3; z=10;
```

```
If [ (%x -eq 3) -a ( $y -eq 5 -o $z -eq 10) ]
```

```
then
```

```
    echo $x
```

```
else
```

```
    echo $y
```

a) 1

b) 3

c) 5

d) error

12. What is the output of the following program?

[ c ] X

```
[ -n $HOME ]
```

```
echo $?
```

```
[ -z $HOME ]
```

```
echo $?
```

a) 0 1

b) 1 0

c) 0 0

d) 1 1

13. In Linux, which of the following command is used to create the filesystem? [ d ] ✓

a) fchk

b) fcsk

c) daemon

d) mkfs

14. The cp command uses

[ d ] ✓

a) standard output file

b) standard input file

b) both input and output file

d) neither standard input nor standard output file

15. Which of the following tool is used to automate Red Hat Linux installation? [ d ] X

a) linux

b) install

c) kickstart

d) setup

16. Which of the following tool is used to boot the Linux Kernel from a DOS file systems?

[ d ] ✓

a) Config.sys

b) Linux.bat

c) SysLinux

d) Linux.sys

17. Which of the following command is used to count the total number of lines, words, and characters contained in a file?

[ a ] ✓

a) wc

b) wcount

c) countw

d) none

18. Identify the hardware structure which is not supported by RedHat? [ d ] ✓

a) IBM-Compatible

b) Alpha

c) SPARC

d) Macintosh

19. Among the following commands which is used vi editors to delete a single character?

[ c ] X

a) a

b) x

c) y

d) z

20. Choose the TCP/IP protocol which is used for remote terminal connection service?

[ d ] ✓

a) FTP

b) UDP

c) RARP

d) TELNET



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30

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**SHELL PROGRAMMING FROM 07/10/2021 TO 30/10/2021**

**ASSESSMENT TEST**

Roll Number: 19941A0543 Name of the Student: D. Lingaiah

**Time: 20 Min**

**(Objective Questions)**

**Max.Marks:20**

Note: Answer the following Questions and each question carries **one** mark.

1. Which of the following can be used to open a file for reading and making changes in shell programming?  
a) r+      b) w+      c) r      d) w  
[ b ] ✓
2. In Linux, which option of rm command is used to remove a directory with all its subdirectories?  
a) -b      b) -o      c) -p      d) -r  
[ d ] ✓
3. Which of the following directory contains device files?  
a) Root      b) bin      c) etc      d) dev  
[ d ] ✓
4. In Linux, how can you add a new user to your system?  
a) useradd      b) adduser      c) linuxconf      d) All of the above  
[ d ] ✓
5. \_\_\_\_\_ is a symbol used to represent special files in Linux OS.  
a) d      b) e      c) s      d) c  
[ a ] ✗
6. Which of the following in UNIX/LINUX remove files or directories?  
a) Ls      b) cd      c) pwd      d) rm  
[ a ] ✗
7. \_\_\_\_\_ searches the strings in file opened in vi editor?  
a) /      b) @      c) #      d) \$  
[ a ] ✓
8. Which of the following 'wildcard' character matches exactly one character?  
a) !      b) &      c) ?      d) \*  
[ c ] ✓
9. In vi editor if keystroke 'I' is pressed in insert mode it will \_\_\_\_\_.  
a) Inserts text to the left of the cursor  
b) Inserts text at the beginning of the cursor  
c) Inserts text to the right of the cursor  
d) From the content of the file  
[ d ] ✓
10. How do you print the lines between 5 and 10, both inclusive?  
a) cat filename|head|tail -6  
b) cat filename|head|tail -5  
c) cat filename |tail +5|head  
d) cat filename |tail -5|head -10  
[ a ] ✓



11. What is the output of the following program?

[ a ] x

```
X=3; y=3; z=10;
If [ (%x -eq 3) -a ( $y -eq 5 -o $z -eq 10) ]
then
```

```
    echo $x
```

```
else
```

```
    echo $y
```

- a) 1            b) 3            c) 5            d) error

12. What is the output of the following program?

[ c ] x

```
[ -n $HOME ]
```

```
echo $?
```

```
[ -z $HOME ]
```

```
echo $?
```

- a) 0 1            b) 1 0            c) 0 0            d) 1 1

13. In Linux, which of the following command is used to create the filesystem? [ c ] x

- a) fchk            b) fcsk c) daemon d) mkfs

14. The cp command uses

[ b ] x

- a) standard output file  
b) standard input file  
b) both input and output file  
d) neither standard input nor standard output file

15. Which of the following tool is used to automate Red Hat Linux installation? [ a ] x

- a) linux            b) install            c) kickstart            d) setup

16. Which of the following tool is used to boot the Linux Kernel from a DOS file systems?

[ d ] ✓

- a) Config.sys            b) Linux.bat            c) SysLinux            d) Linux.sys

17. Which of the following command is used to count the total number of lines, words, and characters contained in a file?

[ d ] x

- a) wc            b) wcount            c) countw            d) none

18. Identify the hardware structure which is not supported by RedHat? [ c ] x

- a) IBM-Compatible            b) Alpha            c) SPARC            d) Macintosh

19. Among the following commands which is used vi editors to delete a single character?

[ b ] x

- a) a            b) x            c) y            d) z

20. Choose the TCP/IP protocol which is used for remote terminal connection service?

[ b ] x

- a) FTP            b) UDP            c) RARP            d) TELNET



## Importance of Linux Programming

- Linux provides many advantages over other operating systems: **Open-source software available for everyone to contribute, modify, and enhance the source code.** It is also available for users to download and use for free. Linux is less vulnerable and more secure than Windows operating systems.

### A Brief History of Linux

1991 August

- Linux is introduced by Linus Torvalds, a student university of "Helsinki" in Finland.
- While the linux you know today was developed with assistance of programmer.
- Linus Torvalds still remain control of the evolving core of Linux O.S. :The Kernel



Linus Benedict Torvalds

### A Brief History of Linux

1992, March

- In March 1992 Version 1.0 of Kernel came into market, the first official release of Linux.
- At this point Linux RAM most of the common Unix tool from compiler to networking software to "X-Windows".



Linus Benedict Torvalds

### A Brief History of Linux

1991 September

Version 0.01 of Torvalds's project is made available via ftp.funet.fi. Ari Lemmke, the systems administrator, gives the directory the name *Linux*.

Linux had originally intended to call the new kernel "Freax".

According to Wikipedia, the name Linux was actually invented by Ari Lemmke who maintained the ftp.funet.fi FTP server from which the kernel was originally distributed.



Ari Lemmke

### A Brief History of Linux

October 1991

Richard Stallman expresses interest in having the Free Software Foundation distribute a GNU system with the Linux kernel.



December 1991

Robert Blum posts the first Linux FAQ

January 1992

Minix creator Andrew Tannenbaum claims "Linux is obsolete" in a posting to comp.os.minix and starts a public discussion on the merits of Linux in which Linus Torvalds participates.

### A Brief History of Linux

- First Linux "distribution", called *MCC Interim Linux* is released by the University of Manchester, England. (February 1992)
- Version 0.95 of the Linux kernel released. First version to be able to support X-Window. (March 1992)
- A Linux distribution called *Softlanding Linux System* (SLS) is released. (September 1992)
- Software und System Entwicklung GmbH* (SuSE) founded in Nuremberg, Germany. Distributes a German version of SLS with corresponding manuals. (November 1992)

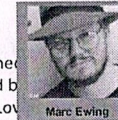
### A Brief History of Linux

1993:

- Version 1.0 of *Slackware* released by Patrick Volkerding. It is based on the SLS distribution.
- Ian Murdock creates the *Debian* distribution.

1994:

- Linux kernel version 1.0 released.
- First issue of *Linux Journal* published.
- Linux distributor *Caldera* founded by Ray Noorda of Novell & Ransom Love.
- Marc Ewing releases the first version of *Red Hat Linux*.



Marc Ewing

### A Brief History of Linux

1995:

- Bob Young partners with Marc Ewing and forms *Red Hat Software*.
- Apache web server project started as a series of patches to the NCS HTTPd server (A Patchy server).



1996:

- Linux kernel version 2.0 released.

### A Brief History of Linux

- Linus Torvalds suggests that a "slightly overweight penguin" would be the best mascot for Linux. He recommends Larry Ewing's "Tux" penguin images.



Tux



A Tuxedo

### A Brief History of Linux

- The following filed a suit against William R. Della Croce, Jr. (September 1996)
  - Linus Torvalds
  - Linux Journal
  - Yggdrasil Computing, Inc.,
  - Linux International
  - Work Group Solutions
 (Digital Equipment Corporation & Red Hat Software contributed to the cost of the legal process)
- to re-assign the Linux trademark to Linus Torvalds. The firm of Davis & Schroeder handled the case on an almost *pro-bono* basis. (Free or reduced charge for public good)
- Kool Desktop Environment* (KDE) project announced.

### A Brief History of Linux

1997:

- The Linux trademark dispute between William Della Croce and Linus Torvalds is settled, with Della Croce re-assigning the trademark to Torvalds.
- Miguel de Icaza starts the *GNOME* project.

1998:

- Version 1.0 of the *K Desktop Environment* (KDE) released.

### A Brief History of Linux

1999:

- Linux kernel version 2.2 released.
- GNOME 1.0 desktop released.

2000:

- Microsoft CEO Steve Ballmer calls Linux "a cancer that attaches itself in an intellectual property sense to everything it touches." in an interview with the Chicago Sun-Times.

### A Brief History of Linux

2001:

- Linux kernel version 2.4 released.

2003:

- Linux kernel version 2.6 is released.
- Novell* acquires German Linux distributor *SuSE*.
- Red Hat announces that they will no longer sell boxed sets of their Linux distribution for retail customers. Instead, they will distribute Linux to end users via a development distribution called *Fedora Core*.

Why it is So Popular?

Multi-users:

- Each user's shells, applications and commands are separate processes
- Number of simultaneous users limited only by:
  - CPU speed and available memory
  - Min. response times required by users/apps

Multi-tasking:

- Many jobs can be under way at the same time
- Jobs truly simultaneous on multi-cpu

Time-sharing:

- A single cpu is shared by all processes
- Processes exec briefly, passing cpu to others
- Process switches occur in milliseconds or less
- Kernel gives process a sense of total control

### Applications of Linux

As the Linux is the OS, it provides lot of applications. Some of them given below:

1) Text And Word Processing Applications

Star Office is Text and word application instead of WordPad and notepad.

2) Programming Language

There is a wide variety of Programming and scripting languages and tools available for Linux.

3) X-windows  
X-windows is a highly flexible and configurable GUI environment that run on Linux as well as almost UNIX System.

### Applications of Linux

4) Internet tool

It supports Netscape as well as Mosaic. It provides wide and full range of software needed to create internet server. It also provide the complete network support to connect the internet.

5) Data base

Today Oracle, Sybase and Informix all offer relational data base provides for Linux.

6) Dos and Windows Compatibility Software

Linux can be made to run DOS software with high degree of stability and compatibility.



## Acquiring and using Linux

There are quite a few ways to obtain a Linux distribution.  
1. One way is to go to the distributor's website and download the linux distribution of our choice.

For example,  
If you want to download

- Mandrake, the go to <http://www.mandriva.com/>.
- SUSE Linux Enterprise Server 9, go to [http://www.novell.com/linux/download\\_linux.html](http://www.novell.com/linux/download_linux.html).

## Acquiring and using Linux

2. Other way is to obtain pre-burned copies of the Linux distribution we need from the distributor's website or from sites like [cheapISO.com](http://cheapISO.com)


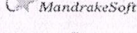


- The price is of such distributions starts from less than Rs. 100/-
- Some new computers have Linux as preinstalled

## Survey of Major Distributions

The major distributions of Linux include:

- Caldera
- Debian
- Mandrake
- Red Hat
- Slackware
- SuSE
- Turbolinux

- |                 |  |
|-----------------|--|
| • Android       | • Manjaro Linux  |
| • Arch Linux    | • MX Linux   |
| • CentOS        | • Puppy Linux  |
| • Debian        | • Slackware  |
| • Elementary OS | • Solus  |
| • Fedora        | • Ubuntu and all its versions (Gnome, Kubuntu, Ubuntu mate, Xubuntu, and Lubuntu—just to name a few) |
| • Gentoo Linux  | • Zorin OS   |
| • Kali Linux    |  |
| • Linux Mint    |  |

Linux distributions.	Website/Logo
Red Hat Linux: <a href="http://www.redhat.com/">http://www.redhat.com/</a>	
SUSE Linux: <a href="http://www.suse.com/">http://www.suse.com/</a>	
Mandrake Linux: <a href="http://www.mandrakesoft.com/">http://www.mandrakesoft.com/</a>	
Caldera Linux: <a href="http://www.calderasystems.com/">http://www.calderasystems.com/</a>	
Debian GNU/Linux: <a href="http://www.debian.org/">http://www.debian.org/</a>	
Slackware Linux: <a href="http://www.slackware.com/">http://www.slackware.com/</a>	

[https://en.wikipedia.org/wiki/List\\_of\\_Linux\\_distributions](https://en.wikipedia.org/wiki/List_of_Linux_distributions)

## System Access

➤ Logging In and using the Linux system

➤ Linux Commands

➤ Logging In and using Remote Linux system

### Logging in and Using Linux System

Because the system can be used by many users some has to be given charge of administration of the system called 'system administrator' who will grant you the authority to use the system.

login: kumar  
Password: \*\*\*\*\*

This will start up a desktop. The default desktop in RedHat Linux 9 is GNOME desktop

If you want to turn off your computer, you must first shut down Linux. You can shut down your system in three ways:

- By using halt command.
  - By using shutdown command.
- Main Menu  
↓  
Logout menu

### #halt

This command will log you out and shut down the system.  
# \$ halt

### # shutdown

shutdown 16:00	shut down at 16:00
shutdown -r now	shutdown immediately and reboot
shutdown -h now	shutdown immediately and halt

Linux also allow alt+ctrl+del

## What is command in Linux?

The Linux command is a **utility of the Linux operating system**. All basic and advanced tasks can be done by executing commands. The commands are executed on the Linux terminal. The terminal is a command-line interface to interact with the system, which is similar to the command prompt in the Windows OS. *Commands in Linux are case-sensitive.*

## Basic Commands

How to run commands

- Finder => Application => Utilitaires => Terminal
- When you log on Unix machine, you will see,

[someone]\$

- One command consists of three parts, i.e. command name, options, arguments.

Example)

[someone~]\$ command-name optionA optionB argument1 argument2

## 3. rmdir Command

The **rmdir** command is used to delete a directory.

**Syntax:**

rmdir <directory name>

**Output:**

```
manor@LAPTOP-2S2C2733:~$ rmdir cse
manor@LAPTOP-2S2C2733:~$ cd cse
-bash: cd: cse: No such file or directory
manor@LAPTOP-2S2C2733:~$
```

## 4. ls Command

The **ls** command is used to display a list of content of a directory.

**Syntax:**

ls

**Output:**

```
manor@LAPTOP-2S2C2733:~$ ls
hello ksrncse new test
```

## Linux Directory Commands

### 1. pwd Command

The **pwd** command is used to display the location of the current working directory.

**Syntax:**

1.pwd

**Output:**

```
manor@LAPTOP-2S2C2733:~$ pwd
/home/manor
```

### 5. cd Command

The **cd** command is used to change the current directory.

**Syntax:**

cd <directory name>

**Output:**

```
manor@LAPTOP-2S2C2733:~$ cd cse
manor@LAPTOP-2S2C2733:~/cse$
```

## 2. mkdir Command

The **mkdir** command is used to create a new directory under any directory.

**Syntax:**

mkdir <directory name>

**Output:**

```
manor@LAPTOP-2S2C2733:~$ mkdir ksrncse
mkdir: cannot create directory 'ksrncse': File exists
manor@LAPTOP-2S2C2733:~$ mkdir cse
manor@LAPTOP-2S2C2733:~$
```

## Linux File commands:

### 6. touch Command

The **touch** command is used to create empty files. We can create multiple empty files by executing it once.

**Syntax:**

touch <file name>

touch <file1> <file2> ....

**Output:**

```
manor@LAPTOP-2S2C2733:~/cse$ touch demo.txt demo1.txt demo2.txt
manor@LAPTOP-2S2C2733:~/cse$ ls
demo.txt demo1.txt demo2.txt
manor@LAPTOP-2S2C2733:~/cse$
```



## 7. cat Command

The cat command is a multi-purpose utility in the Linux system. It can be used to create a file, display content of the file, copy the content of one file to another file, and more.

### Syntax:

```
cat [OPTION]... [FILE]..
```

To create a file, execute it as follows: `cat > <file name>`

// Enter file content

Press "CTRL+ D" keys to save the file. To display the content of the file, execute it as follows:

```
cat <file name>
```

Output:

```
manor@LAPTOP-2S2C2733:~/cse$ cat demo.txt
This is my first demo file.
Welcome to all.^Z
[1]+  Stopped                  cat > demo.txt
manor@LAPTOP-2S2C2733:~/cse$ cat demo.txt
This is my first demo file.
manor@LAPTOP-2S2C2733:~/cse$
```

## 10. mv Command

The mv command is used to move a file or a directory from one location to another location.

### Syntax:

```
mv <file name> <directory path>
```

### Output:

```
manor@LAPTOP-2S2C2733:~/cse$ cd ..
manor@LAPTOP-2S2C2733:~$ ls
cse  hello  karmcse  new  test
manor@LAPTOP-2S2C2733:~$ mv karmcse cse
manor@LAPTOP-2S2C2733:~$ cd cse
manor@LAPTOP-2S2C2733:~/cse$ ls
demo.txt  demo1.txt  demo2.txt  karmcse
manor@LAPTOP-2S2C2733:~/cse$ mv karmcse karmcse1
manor@LAPTOP-2S2C2733:~/cse$ ls
demo.txt  demo1.txt  demo2.txt  karmcse1
manor@LAPTOP-2S2C2733:~/cse$
```

## 11. rename Command

The rename command is used to rename files. It is useful for renaming a large group of files.

### Syntax:

```
rename 's/old-name/new-name/' files
```

For example, to convert all the text files into pdf files, execute the below command:

```
rename 's/\.txt$/\.pdf/' *.txt
```

Output:

```
manor@LAPTOP-2S2C2733:~/cse$ cat text.txt
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20^Z
[3]+  Stopped                  cat > text.txt
manor@LAPTOP-2S2C2733:~/cse$
```

```
manor@LAPTOP-2S2C2733:~/cse$ head text.txt
1
2
3
4
5
6
7
8
9
10
manor@LAPTOP-2S2C2733:~/cse$
manor@LAPTOP-2S2C2733:~/cse$ head -5 text.txt
1
2
3
4
5
manor@LAPTOP-2S2C2733:~/cse$
```

## 14. tac Command

The tac command is the reverse of cat command, as its name specified. It displays the file content in reverse order (from the last line).

### Syntax:

```
tac <file name>
```

Output:

```
manor@LAPTOP-2S2C2733:~/cse$ tail text.txt
10
11
12
13
14
15
16
17
18
19
manor@LAPTOP-2S2C2733:~/cse$ tail -3 text.txt
17
18
19
```

## 8. rm Command

The rm command is used to remove a file.

### Syntax:

```
rm <file name>
```

### Output:

```
manor@LAPTOP-2S2C2733:~/cse$ rm demo1.txt
manor@LAPTOP-2S2C2733:~/cse$ cat demo1.txt
cat: demo1.txt: No such file or directory
manor@LAPTOP-2S2C2733:~/cse$
```

```
javatoint@javatoint-Inspiron-3542:~$ rename 's/\.txt$/\.pdf/' *.txt
javatoint@javatoint-Inspiron-3542:~$ ls
a      Desktop      examples.desktop  Music  Python-3.8.0
Akash  Directory    hello.c           NewFolder  sample
a.out  Documents    hello.l           pico      snap
composer.phar  Downloads    hello.o           Pictures  Templates
demo1.pdf  eclipse      hello.s           project   Test.pdf
Demo.sh   eclipse-Installer  index.html       Public    Videos
Demo.txt  eclipse-workspace  mail             Python
```

## 13. tail Command

The tail command is similar to the head command. The difference between both commands is that it displays the last ten lines of the file content. It is useful for reading the error message.

### Syntax:

```
tail <file name>
```

Output:

```
manor@LAPTOP-2S2C2733:~/cse$ tac text.txt
19
18
17
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1
manor@LAPTOP-2S2C2733:~/cse$
```

## 9. cp Command

The cp command is used to copy a file or directory.

### Syntax:

To copy in the same directory:

```
cp <existing file name> <new file name>
```

To copy in a different directory:

### Output:

```
manor@LAPTOP-2S2C2733:~/cse$ cp demo.txt demo1.txt
manor@LAPTOP-2S2C2733:~/cse$ cat demo1.txt
This is my first demo file.
manor@LAPTOP-2S2C2733:~/cse$
```

## Linux File Content Commands:

## 12. head Command

The head command is used to display the content of a file. It displays the first 10 lines of a file.

### Syntax:

```
head <file name>
```

Output:

```
manor@LAPTOP-2S2C2733:~/cse$ cat text.txt
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
manor@LAPTOP-2S2C2733:~/cse$
```

## 15. more command

The more command is quite similar to the cat command, as it is used to display the file content in the same way that the cat command does. The only difference between both commands is that, in case of larger files, the more command displays screenful output at a time.

In more command, the following keys are used to scroll the page:

ENTER key: To scroll down page by line.

Space bar: To move to the next page.

b key: To move to the previous page.

/ key: To search the string.

### Syntax:

```
more <file name>
```

Output:



```

;; gyp.el - font-lock-mode support for gyp files.
;; Copyright (c) 2012 Google Inc. All rights reserved.
;; Use of this source code is governed by a BSD-style license that can be
;; found in the LICENSE file.

;; Put this somewhere in your load-path and
;; (require 'gyp)

(require 'python)
(require 'cl)

(when (string-match "python-mode.el" (symbol-file 'python-mode 'defun))
  (error (concat "python-mode must be loaded from python.el (bundled with "
    "recent emacs), not from the older and less maintained "
    "python-mode.el")))

(defadvice python-indent-calculate-levels (after gyp-indent-closing-parens
  activate)
  "De-indent closing parens, braces, and brackets in gyp-mode."
  (when (and (eq major-mode 'gyp-mode)
    (string-match "^ *([{}])$" (buffer-substring-no-properties
      (buffer-substring-no-properties

```

## 18. id Command

The id command is used to display the user ID (UID) and group ID (GID).

**Syntax:**

id

**Output:**

```

javatpoint@javatpoint-Inspiron-3542:~$ id
uid=1000(javatpoint) gid=1000(javatpoint) groups=1000(javatpoint),4(edn),24(cdrom),27(sudo),30(dip),44(plugdev),116(lpadmin),126(sambashare)
javatpoint@javatpoint-Inspiron-3542:~$

```

## Linux Filter Commands:

Filters are programs that take plain text (either stored in a file or produced by another program) as standard input, transforms it into a meaningful format, and then returns it as standard output.

## 24. grep Command

The grep is the most powerful and used filter in a Linux system. The 'grep' stands for "global regular expression print." It is useful for searching the content from a file. Generally, it is used with the pipe.

**Syntax:**

command | grep <searchWord>

**Output:**

## 16. less Command

The less command is similar to the more command. It also includes some extra features such as 'adjustment in width and height of the terminal.' Comparatively, the more command cuts the output in the width of the terminal.

**Syntax:**

less <file name>

**Output:**

## 19. useradd Command

The useradd command is used to add or remove a user on a Linux server.

**Syntax:**

useradd username

**Output:**

```

javatpoint@javatpoint-Inspiron-3542:~$ sudo useradd JTP
[sudo] password for javatpoint:
javatpoint@javatpoint-Inspiron-3542:~$

```

## Linux Filter Commands:

### 22. cat Command

The cat command is also used as a filter. To filter a file, it is used inside pipes.

**Syntax:**

cat <fileName> | cat or tac | cat or tac |

...

**Output:**

```

manjaro-LAPTOP-252C2733:~/cse$ cat demo1.txt
This is my first demo file.
manjaro-LAPTOP-252C2733:~/cse$ cat demo1.txt | tac | cat | tac
This is my first demo file.
manjaro-LAPTOP-252C2733:~/cse$ cat demo1.txt | tac
This is my first demo file.
manjaro-LAPTOP-252C2733:~/cse$ cat demo1.txt | tac | cat
This is my first demo file.
manjaro-LAPTOP-252C2733:~/cse$

```

```

manjaro-LAPTOP-252C2733:~/cse$ cat test1.txt
A distributed system is a computing environment in which various components are spread across multiple computers (or other computing devices) on a network. These devices split up the work, coordinating their efforts to complete the job more efficiently than if a single device had been responsible for the task.
device
^Z
[5]+ Stopped cat > test1.txt
manjaro-LAPTOP-252C2733:~/cse$ cat test1.txt | grep device
A distributed system is a computing environment in which various components are spread across multiple computers (or other computing devices) on a network. These devices split up the work, coordinating their efforts to complete the job more efficiently than if a single device had been responsible for the task.
device
manjaro-LAPTOP-252C2733:~/cse$

```

## Linux User Commands:

### 17. su Command

The su command provides administrative access to another user. In other words, it allows access of the Linux shell to another user.

**Syntax:**

su <user name>

**Output:**

```

javatpoint@javatpoint-Inspiron-3542:~$ su javatpoint
Password:
javatpoint@javatpoint-Inspiron-3542:~$

```

### 20. passwd Command

The passwd command is used to create and change the password for a user.

**Syntax:**

passwd <username>

**Output:**

```

javatpoint@javatpoint-Inspiron-3542:~$ sudo passwd JTP
Enter new UNIX password:
Retype new UNIX password:
passwd: password updated successfully

```

### 23. cut Command

The cut command is used to select a specific column of a file. The '-d' option is used as a delimiter, and it can be a space (' '), a slash (/), a hyphen (-), or anything else. And, the '-f' option is used to specify a column number.

**Syntax:**

Cut

-d(delimiter)-f(columnNumber) <fileName>

**Output:**

### 25. comm Command

The comm command is used to compare two files or streams. By default, it displays three columns, first displays non-matching items of the first file, second indicates the non-matching item of the second file, and the third column displays the matching items of both files.

**Syntax:**

comm <file1> <file2>

**Output:**

```

;; gyp.el - font-lock-mode support for gyp files.
;; Copyright (c) 2012 Google Inc. All rights reserved.
;; Use of this source code is governed by a BSD-style license that can be
;; found in the LICENSE file.

;; Put this somewhere in your load-path and
;; (require 'gyp)

(require 'python)
(require 'cl)

(when (string-match "python-mode.el" (symbol-file 'python-mode 'defun))
  (error (concat "python-mode must be loaded from python.el (bundled with "
    "recent emacs), not from the older and less maintained "
    "python-mode.el")))

(defadvice python-indent-calculate-levels (after gyp-indent-closing-parens
  activate)

```

### 21. groupadd Command

The groupadd command is used to create a user group.

**Syntax:**

groupadd <group name>

**Output:**

```

javatpoint@javatpoint-Inspiron-3542:~$ sudo groupadd Developer
javatpoint@javatpoint-Inspiron-3542:~$

```

```

javatpoint@javatpoint-Inspiron-3542:~$ cat >marks.txt
alex:80
alen:70
jon:75
carry:85
celena:90
justin:80
javatpoint@javatpoint-Inspiron-3542:~$ cut -d: -f2 marks.txt
80
70
75
85
90
80
javatpoint@javatpoint-Inspiron-3542:~$

```

```

manjaro-LAPTOP-252C2733:~/cse$ cat >aaa.txt
Goodmorning to all
Shell programming
^Z
[5]+ Stopped cat > aaa.txt
manjaro-LAPTOP-252C2733:~/cse$ cat >bbb.txt
Goodmorning to all
shellprogramming
^Z
[6]+ Stopped cat > bbb.txt
manjaro-LAPTOP-252C2733:~/cse$ comm aaa.txt bbb.txt
Goodmorning to all
Shell programming
shellprogramming
manjaro-LAPTOP-252C2733:~/cse$

```



## 26. sed command

The sed command is also known as **stream editor**. It is used to edit files using a regular expression. It does not permanently edit files; instead, the edited content remains only on display. It does not affect the actual file.

### Syntax:

command | sed 's/<oldWord>/<newWord>/'

### Output:

```
javatpoint@javatpoint-Inspiron-3542:~$ echo class7 | sed 's/class7/jtp/'
jtp7
javatpoint@javatpoint-Inspiron-3542:~$ echo class7 | sed 's/7/10/'
class10
```

## 28. tr Command

The tr command is used to translate the file content like from lower case to upper case.

### Syntax:

command | tr '<old>' '<new>'

### Output:

```
manor@LAPTOP-252C2733:~/cse$ cat test1.txt | tr 'a-z' 'A-Z'
3 50 320 test1.txt
manor@LAPTOP-252C2733:~/cse$
```

## 27. tee command

The tee command is quite similar to the cat command. The only difference between both filters is that it puts standard input on standard output and also write them into a file.

### Syntax:

cat <fileName> | tee <newFile> | cat  
or tac |.....

### Output:

```
javatpoint@javatpoint-Inspiron-3542:~$ cat marks.txt | tee new.txt | cat
alex-50
alen-70
jon-75
carry-85
celena-90
justin-80
javatpoint@javatpoint-Inspiron-3542:~$ cat new.txt
alex-50
alen-70
jon-75
carry-85
celena-90
justin-80
```

## 29. uniq Command

The uniq command is used to form a sorted list in which every word will occur only once.

### Syntax:

command <fileName> | uniq

### Output:

```
manor@LAPTOP-252C2733:~/cse$ cat >word.txt
zoo
pen
quit
sun
bat
rat
dog
pen
bat
apple
egg
fan
egg
7
[7]+ Stopped cat > word.txt
manor@LAPTOP-252C2733:~/cse$ sort word.txt | uniq
```

## 31. od Command

The od command is used to display the content of a file in different s, such as hexadecimal, octal, and ASCII characters.

### Syntax:

od -b <fileName> // Octal format  
od -t x1 <fileName> // Hexa decimal form  
at  
od -c <fileName> // ASCII character for  
mat

### Output:

```
manor@LAPTOP-252C2733:~/cse$ od -t x1 test1.txt
00000000 012 101 040 144 151 163 164 162 151 142 165 164 145 144 040 163
00000020 171 163 164 145 155 040 151 163 040 141 040 143 157 155 160 165
00000040 164 151 156 147 040 145 156 166 151 162 157 156 153 145 156 164
00000060 040 151 156 040 167 159 131 143 150 040 166 141 162 151 157 145
00000080 163 040 143 157 155 160 157 156 145 156 164 163 040 141 162 145
00000100 040 163 160 162 145 141 144 040 141 143 162 157 163 163 040 155
00000120 163 040 040 157 162 040 157 144 150 145 162 040 143 157 155 160
00000140 165 154 164 151 160 154 145 040 143 157 155 160 165 164 145 162
00000160 163 040 040 157 162 040 157 144 150 145 162 040 143 157 155 160
00000180 165 164 151 156 147 040 144 145 166 151 143 145 163 051 040 157
00000200 156 040 141 040 156 145 164 167 157 162 153 056 040 124 150 145
00000220 163 145 040 146 145 166 151 143 145 163 040 163 160 154 151 164
00000240 040 165 160 040 145 120 145 040 167 157 162 153 024 040 143 157
00000260 157 162 144 151 156 141 164 151 156 147 040 164 150 145 151 162
00000280 040 145 146 146 157 162 164 163 040 164 157 040 143 157 155 160
00000300 154 145 164 145 040 160 150 145 040 152 157 142 040 155 157 162
00000320 145 040 145 146 146 151 143 151 145 156 164 154 171 040 164 150
00000340 141 156 040 151 146 040 141 040 163 151 156 147 154 145 040 144
00000360 145 166 151 143 145 040 150 141 144 040 142 145 145 156 040 162
00000380 145 163 160 157 156 163 151 142 154 145 040 146 157 162 040 164
00000400 150 145 040 164 141 163 155 056 012 144 145 166 151 143 145 012
manor@LAPTOP-252C2733:~/cse$
```

## wc Command

The wc command is used to count the lines, words, and characters in a file.

### Syntax:

wc <file name>

### Output:

```
manor@LAPTOP-252C2733:~/cse$ wc test1.txt
 3 50 320 test1.txt
manor@LAPTOP-252C2733:~/cse$
```

## 32. sort Command

The sort command is used to sort files in alphabetical order.

### Syntax:

sort <file name>

### Output:

```
manor@LAPTOP-252C2733:~/cse$ sort word.txt
7
apple
bat
dog
fan
pen
quit
sun
zoo
```

## 33. gzip Command

The gzip command is used to truncate the file size. It is a compressing tool. It replaces the original file by the compressed file having '.gz' extension.

### Syntax:

gzip <file1> <file2> <file3>...

### Output:

```
manor@LAPTOP-252C2733:~/cse$ gzip test1.txt
manor@LAPTOP-252C2733:~/cse$ ls
aaa.txt  bbb.txt  ccc.txt  ddd.txt  eee.txt  fff.txt  ggg.txt  hhh.txt  iii.txt  jjj.txt  kkk.txt  lll.txt  mmm.txt  nnn.txt  ooo.txt  ppp.txt  qqq.txt  rrr.txt  sss.txt  ttt.txt  uuu.txt  vvv.txt  www.txt  xxx.txt  yyy.txt  zzz.txt
```



#### 34. gunzip Command

The **gunzip** command is used to decompress a file. It is a reverse operation of gzip command.

##### Syntax:

gunzip <file1> <file2> <file3>...

##### Output:

```
manor@LAPTOP-2S2C2733:~/cse$ gunzip test1.txt
manor@LAPTOP-2S2C2733:~/cse$ ls
aaa.txt bbb.txt demo.txt demo1.txt demo2.txt history.txt ismsel test1.txt test.txt word.txt
manor@LAPTOP-2S2C2733:~/cse$
```

##### Output:

```
javatpoint@javatpoint-Inspiron-3542:~$ locate sysctl.conf
/etc/sysctl.conf
/etc/sysctl.d/99-sysctl.conf
/etc/ufw/sysctl.conf
/snap/core/8935/etc/sysctl.conf
/snap/core/8935/etc/sysctl.d/99-sysctl.conf
/snap/core/9065/etc/sysctl.conf
/snap/core/9065/etc/sysctl.d/99-sysctl.conf
/snap/core/1705/etc/sysctl.d/99-sysctl.conf
/snap/core/1754/etc/sysctl.d/99-sysctl.conf
/usr/share/doc/procps/examples/sysctl.conf
/usr/share/man/man5/sysctl.conf.5.gz
```

```
manor@LAPTOP-2S2C2733:~/cse$ cal april 1998
April 1998
Su Mo Tu We Th Fr Sa
                1  2  3  4
 5  6  7  8  9 10 11
12 13 14 15 16 17 18
19 20 21 22 23 24 25
26 27 28 29 30
manor@LAPTOP-2S2C2733:~/cse$
```

#### 41. zcat Command

The **zcat** command is used to display the compressed files.

##### Syntax:

zcat <file name>

##### Output:

```
manor@LAPTOP-2S2C2733:~/cse$ zcat test1.txt
manor@LAPTOP-2S2C2733:~/cse$
```

#### Linux Utility Commands:

##### 35. find Command

The **find** command is used to find a particular file within a directory. It also supports various options to find a file such as by name, by type, by date, and more.

The following symbols are used after the find command:

(.) : For current directory name

(/) : For root

##### Syntax:

find . -name "\*.pdf"

##### Output:

```
manor@LAPTOP-2S2C2733:~/cse$ find -name '*.txt'
./aaa.txt
./bbb.txt
./demo.txt
./demo1.txt
./demo2.txt
./history.txt
./test1.txt
./text.txt
./word.txt
manor@LAPTOP-2S2C2733:~/cse$
```

#### 37. date Command

The **date** command is used to display date, time, time zone, and more.

##### Syntax:

date

##### Output:

```
manor@LAPTOP-2S2C2733:~/cse$ date
Thu Oct 7 22:35:50 IST 2021
manor@LAPTOP-2S2C2733:~/cse$
```

#### 38. cal Command

The **cal** command is used to display the current month's calendar with the current date highlighted.

##### Syntax:

cal

##### Output:

```
manor@LAPTOP-2S2C2733:~/cse$ cal
October 2021
Su Mo Tu We Th Fr Sa
                1  2  3  4  5  6  7  8  9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
manor@LAPTOP-2S2C2733:~/cse$
```

#### 40. time Command

The **time** command is used to display the time to execute a command.

##### Syntax:

time

##### Output:

```
manor@LAPTOP-2S2C2733:~/cse$ time
real    0m0.000s
user    0m0.000s
sys     0m0.000s
manor@LAPTOP-2S2C2733:~/cse$ cat test1.txt
```

#### 36. locate Command

The **locate** command is used to search a file by file name. It is quite similar to find command; the difference is that it is a background process. It searches the file in the database, whereas the find command searches in the file system. It is faster than the find command. To find the file with the locates command, keep your database updated.

##### Syntax:

locate <file name>

```
manor@LAPTOP-2S2C2733:~/cse$ cal 2020
2020
January February March
Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa
 1  2  3  4  5  6  7  8  9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
April May June
Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa
 1  2  3  4  5  6  7  8  9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
July August September
Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa
 1  2  3  4  5  6  7  8  9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
October November December
Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa
 1  2  3  4  5  6  7  8  9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
manor@LAPTOP-2S2C2733:~/cse$
```

#### 39. sleep Command

The **sleep** command is used to hold the terminal by the specified amount of time. By default, it takes time in seconds.

##### Syntax:

sleep <time>

##### Output:

```
manor@LAPTOP-2S2C2733:~/cse$ sleep 5
```

```
manor@LAPTOP-2S2C2733:~/cse$ sleep 5
manor@LAPTOP-2S2C2733:~/cse$
```

#### 42. df Command

The **df** command is used to display the disk space used in the file system. It displays the output as in the number of used blocks, available blocks, and the mounted directory.

##### Syntax:

df

##### Output:

```
manor@LAPTOP-2S2C2733:~/cse$ df
Filesystem      1K-blocks    Used Available Use% Mounted on
rootfs          158150652 102676352 55474380 65% /
none            158150652 102676352 55474380 65% /dev
none            158150652 102676352 55474380 65% /run
none            158150652 102676352 55474380 65% /run/lock
none            158150652 102676352 55474380 65% /run/shm
none            158150652 102676352 55474380 65% /run/user
tmpfs           158150652 102676352 55474380 65% /sys/fs/cgroup
tmpfs           158150652 102676352 55474380 65% /mnt/c
tmpfs           158150652 102676352 55474380 65% /mnt/d
manor@LAPTOP-2S2C2733:~/cse$
```

#### 43. mount Command

The **mount** command is used to connect an external device file system to the system's file system.

##### Syntax:

mount -t type <device> <directory>

##### Output:



```
manor@LAPTOP-252C2733:~/csd$ clear
manor@LAPTOP-252C2733:~/csd$
manor@LAPTOP-252C2733:~/csd$
```

After pressing the ENTER key, it will clear the terminal screen.



#### 44. exit Command

Linux **exit** command is used to exit from the current shell. It takes a parameter as a number and exits the shell with a return of status number.

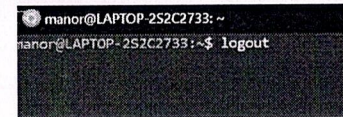
**Syntax:**

exit

**Output:**

```
javatpoint@javatpoint-Inspiron-3542:~$ exit
```

After pressing the ENTER key, it will exit the terminal.



#### 46. Link command:

A link creates a reference to a file or folder. Symbolic links are used in Linux for managing and collating files.

**In command to create symbolic links**

**Syntax:**

In [-sf] [source] [destination]

- By default, the **ln** command creates a hard link.
- Use the **-s** option to create a soft (symbolic) link.
- The **-f** option will force the command to overwrite a file that already exists.
- Source** is the file or directory being linked to.
- Destination** is the location to save the link – if this is left blank, the symlink is stored in the current working directory.

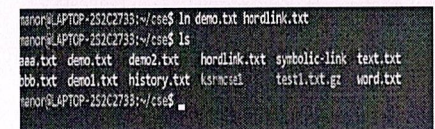
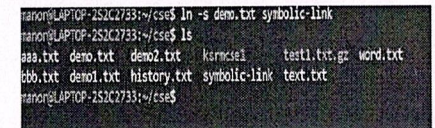
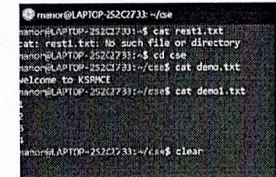
#### 45. clear Command

Linux **clear** command is used to clear the terminal screen.

**Syntax:**

clear

**Output:**



<https://linuxize.com/post/how-to-create-symbolic-links-in-linux-using-the-ln-command/>

#### 47. Removing Symlinks

To delete/remove symbolic links use either the **unlink** or **rm** command.

The syntax of the **unlink** is very simple:

unlink symlink\_to\_remove

Removing a symbolic link using the **rm** command is the same as when removing a file:

rm symlink\_to\_removezz

#### Hard Link :

A hard link acts as a copy (mirrored) of the selected file. It accesses the data available in the original file.

If the earlier selected file is deleted, the hard link to the file will still contain the data of that file.

#### Soft Link :

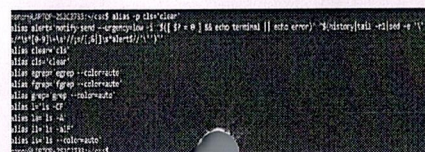
A soft link (also known as Symbolic link) acts as a pointer or a reference to the file name. It does not access the data available in the original file. If the earlier file is deleted, the soft link will be pointing to a file that does not exist anymore.

#### Syntax:

alias [-p] [name=value] ... ]

alias name="value"

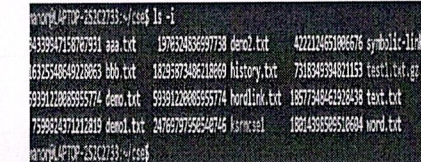
```
manor@LAPTOP-252C2733:~/csd$ alias cls='clear'
manor@LAPTOP-252C2733:~/csd$
```



#### 48. Alias command:

**alias** command instructs the shell to replace one string with another string while executing the commands.

When we often have to use a single big command multiple times, in those cases, we create something called as **alias** for that command. **Alias** is like a shortcut command which will have same functionality as if we are writing the whole command.

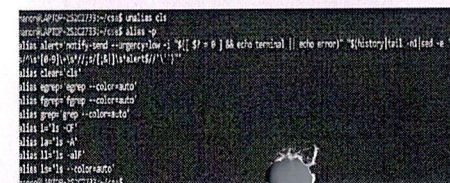


<https://ostechinix.com/explaining-soft-link-and-hard-link-in-linux-with-examples/>

49. Creating an Unalias : Removing an existing alias is known as unaliasing.

**Syntax:**

unalias [alias name]



#### Linux Networking Commands:

#### 50. ip Command

Linux **ip** command is an updated version of the **ifconfig** command. It is used to assign an IP address, initialize an interface, disable an interface.

**Syntax:**

ip a or ip addr



Linux ssh command is used to create a remote connection through the ssh protocol.

**Syntax:**

ssh user\_name@host(IP/Domain\_name)</p>

The host command is used to display the IP address for a given domain name and vice versa. It performs the DNS lookups for the DNS Query.

**Syntax:**

host <domain name> or <ip address>

It tells you about the system's username.

**Syntax:**

whoami

The mail command is used to send emails from the command line.

**Syntax:**

```
mail -s "Subject" <recipient address>
```

**Output:**

```
javatpoint@javatpoint-Inspiron-3542:~$ mail -s 'Hello World' Himanshubey481@gmail.com
Cc:
Hello There
Hope you are doing well.
```

The ping command is used to check the connectivity between two nodes, that is whether the server is connected. It is a short form of "Packet Internet Groper."

**Syntax:**

ping <destination>

**Output:**

```

javatoint@javatoint:~$ telnet 194.189.102.51 80
Trying 194.189.102.51:80...
Connected to 194.189.102.51.
Escape character is '^['.
64 bytes from www.java[...]: icmp_seq=1 ttl=64 time=1882 m
64 bytes from www.java[...]: icmp_seq=2 ttl=64 time=1043 m
64 bytes from www.java[...]: icmp_seq=3 ttl=64 time=2136 m
64 bytes from www.java[...]: icmp_seq=4 ttl=64 time=1122 m

```