**Operating System (MCA)**

**Date: - 11/08/2025**

┌──(dheerajkumar㉿kali73)-[~]

└─$ ls

Desktop Downloads packages.microsoft.gpg Public Videos

Documents Music Pictures Templates

┌──(dheerajkumar㉿kali73)-[~]

└─$ cd Desktop/

┌──(dheerajkumar㉿kali73)-[~/Desktop]

└─$ ls

Coder operatinSystem

┌──(dheerajkumar㉿kali73)-[~/Desktop]

└─$ cd operatinSystem

┌──(dheerajkumar㉿kali73)-[~/Desktop/operatinSystem]

└─$ date

Monday 11 August 2025 12:06:36 PM IST

┌──(dheerajkumar㉿kali73)-[~/Desktop/operatinSystem]

└─$ cal

August 2025

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

┌──(dheerajkumar㉿kali73)-[~/Desktop/operatinSystem]

└─$ ls

┌──(dheerajkumar㉿kali73)-[~/Desktop/operatinSystem]

└─$ pwd

/home/dheerajkumar/Desktop/operatinSystem

┌──(dheerajkumar㉿kali73)-[~/Desktop/operatinSystem]

└─$ mkdir mca-os

┌──(dheerajkumar㉿kali73)-[~/Desktop/operatinSystem]

└─$ ls

mca-os

┌──(dheerajkumar㉿kali73)-[~/Desktop/operatinSystem]

└─$ cd mca-os

┌──(dheerajkumar㉿kali73)-[~/Desktop/operatinSystem/mca-os]

└─$ pwd

/home/dheerajkumar/Desktop/operatinSystem/mca-os

┌──(dheerajkumar㉿kali73)-[~/Desktop/operatinSystem/mca-os]

└─$ cd ..

┌──(dheerajkumar㉿kali73)-[~/Desktop/operatinSystem]

└─$ ls

mca-os

┌──(dheerajkumar㉿kali73)-[~/Desktop/operatinSystem]

└─$ rmdir mca-os

┌──(dheerajkumar㉿kali73)-[~/Desktop/operatinSystem]

└─$ ls

┌──(dheerajkumar㉿kali73)-[~/Desktop/operatinSystem]

└─$ touch testing.txt

┌──(dheerajkumar㉿kali73)-[~/Desktop/operatinSystem]

└─$ ls

testing.txt

┌──(dheerajkumar㉿kali73)-[~/Desktop/operatinSystem]

└─$ du testing.txt

0 testing.txt

┌──(dheerajkumar㉿kali73)-[~/Desktop/operatinSystem]

└─$ echo My name is Dheeraj Kumar >> testing.txt

┌──(dheerajkumar㉿kali73)-[~/Desktop/operatinSystem]

└─$ du testing.txt

4 testing.txt

┌──(dheerajkumar㉿kali73)-[~/Desktop/operatinSystem]

└─$ grep Dheeraj testing.txt

My name is Dheeraj Kumar

┌──(dheerajkumar㉿kali73)-[~/Desktop/operatinSystem]

└─$ echo This is the testing to enter some text in testing.txt file. >> testing.txt

┌──(dheerajkumar㉿kali73)-[~/Desktop/operatinSystem]

└─$ echo With the help of echo, we can enter the text or code in the given file >> testing.txt

┌──(dheerajkumar㉿kali73)-[~/Desktop/operatinSystem]

└─$ echo Linux is very important to learn every developer. >> testing.txt

┌──(dheerajkumar㉿kali73)-[~/Desktop/operatinSystem]

└─$ echo Linux is used as a operating system in server. >> testing.txt

┌──(dheerajkumar㉿kali73)-[~/Desktop/operatinSystem]

└─$ echo I am using Kali linux in my own laptop. >> testing.txt

┌──(dheerajkumar㉿kali73)-[~/Desktop/operatinSystem]

└─$ cat testing.txt

My name is Dheeraj Kumar

This is the testing to enter some text in testing.txt file.

With the help of echo, we can enter the text or code in the given file

Linux is very important to learn every developer.

Linux is used as a operating system in server.

I am using Kali linux in my own laptop.

┌──(dheerajkumar㉿kali73)-[~/Desktop/operatinSystem]

└─$ cat -n testing.txt # this will show the content of the file and -n will give the line number

1 My name is Dheeraj Kumar

2 This is the testing to enter some text in testing.txt file.

3 With the help of echo, we can enter the text or code in the given file

4 Linux is very important to learn every developer.

5 Linux is used as a operating system in server.

6 I am using Kali linux in my own laptop.

┌──(dheerajkumar㉿kali73)-[~/Desktop/operatinSystem]

└─$ head testing.txt # head command will show top 5 line of the content

My name is Dheeraj Kumar

This is the testing to enter some text in testing.txt file.

With the help of echo, we can enter the text or code in the given file

Linux is very important to learn every developer.

Linux is used as a operating system in server.

I am using Kali linux in my own laptop.

┌──(dheerajkumar㉿kali73)-[~/Desktop/operatinSystem]

└─$ head -n 4 testing.txt

My name is Dheeraj Kumar

This is the testing to enter some text in testing.txt file.

With the help of echo, we can enter the text or code in the given file

Linux is very important to learn every developer.

┌──(dheerajkumar㉿kali73)-[~/Desktop/operatinSystem]

└─$ # head -n 4 --> will show the 4 line of content

┌──(dheerajkumar㉿kali73)-[~/Desktop/operatinSystem]

└─$ tail testing.txt

My name is Dheeraj Kumar

This is the testing to enter some text in testing.txt file.

With the help of echo, we can enter the text or code in the given file

Linux is very important to learn every developer.

Linux is used as a operating system in server.

I am using Kali linux in my own laptop.

┌──(dheerajkumar㉿kali73)-[~/Desktop/operatinSystem]

└─$ tail -n 4 testing.txt

With the help of echo, we can enter the text or code in the given file

Linux is very important to learn every developer.

Linux is used as a operating system in server.

I am using Kali linux in my own laptop.

┌──(dheerajkumar㉿kali73)-[~/Desktop/operatinSystem]

└─$ # tail -n 4 --> will show bottom 4 line of content

┌──(dheerajkumar㉿kali73)-[~/Desktop/operatinSystem]

└─$

**Commands**

* **ls: -** List all the file and folder inside the path.
* **cd: -** Change directory.
* **cd .. : -** Change directory one step back
* **cd ~ :**- the command cd ~ is used to change the current working directory to the user's home directory. If you are currently in /usr/local/bin and you type cd ~, you will be returned to your home directory, which might be something like /home/your\_username**.**
* **date: -** It will show the current date.
* **cal: -** It will show the calendar.
* **pwd: -** Present working directory.
* **mkdir: -** Make directory.
* **touch: -** Make file any of the type. For Example if you want to create testing.txt then write touch testing.txt
* **rmdir:** - Remove directory.
* **rm: -** Remove file
* **du:** - The du command in Linux is a powerful utility used to estimate and display the disk space usage of files and directories. It stands for "disk usage".
* **echo: -** The echo command is used to display a line of text. You can redirect its output to a file using the > or >> operators.

**echo "This text will overwrite the file." > filename.txt**

* **cat: -** The cat command in Linux is a versatile and fundamental command-line utility used for handling files. Its name, "cat", is short for "concatenate", reflecting its original purpose of combining files.

**Useful options**

The cat command offers several options to customize its behavior:

* -n or --number: Numbers all output lines.
* -b or --number-nonblank: Numbers only non-empty output lines.
* -s or --squeeze-blank: Suppresses multiple adjacent blank lines, replacing them with a single blank line.
* -E or --show-ends: Displays a dollar sign ($) at the end of each line, indicating line endings.
* -T or --show-tabs: Displays tab characters as ^I.
* -A or --show-all: Combines the functionality of -v, -E, and -T.
* -v or --show-nonprinting: Displays non-printing characters (except tabs and newlines) using ^ and M- notation
* **head: -** The head command in Linux is a command-line utility used to display the first few lines of one or more text files. It's useful for quickly inspecting the contents of a large file or the output of a command.

head -n 5 filename.txt # Displays the first 5 lines

head -c 20 filename.txt # Displays the first 20 bytes

**Useful options**

* -n <number>: Specifies the number of lines.
* -c <number>: Specifies the number of bytes.
* -q or --quiet: Suppresses the filename header for multiple files.
* -v or --verbose: Always displays the filename header.
* **tail: -** The tail command in Linux is a command-line utility used to display the last part of a file or files. By default, it shows the last 10 lines of the input. It's essentially the inverse of the head command, which shows the beginning lines of a file.

tail filename.txt

This command outputs the last 10 lines of filename.txt to your terminal.

* tail -n 4 filename.txt: - This will show bottom 4 line of content.