Answer to the Ques. no. - 1

Cat is a tool for concatanation. It outputs the content of a file in terminal.

more and less have similarity with cat. But they have differences on how they operate. cat outputs the full content at once. more outputs by window size. less is more controllable and it can output line by line of a file.

Cat can be used to output multiple file at once.

Ex: # cat file1 file2 file3

Answer to the Q. no. - 2

cd : change directory

previous directory: # cd ..

root directory: # cd /

Answer to the Q. no. - 3

cp /Home/Documents/OS/source.txt /Home/Downloads/SUST/source.txt

using -t:

cp /Home/Documents/os/source.txt /Home/Downloads/su

cp -t /Home/Downloads/SUST /Home/Documents/OS/source.txt
-t

Answer to the Q. no. - 5

ls: list files and directories

ls -lah: This command lists all the files along with hidden files of a directory in long listing format.

ls -R is used to see all folders and files recursively
Is -laR

Answer to the Q. no. - 6

touch can create a file named pub.get
rm -rf deletes all the files and folders recursively.
Here, -f is used to force and -r used for recursive option.

Ans. - 7

less -p or after running less we can type '/pattern' format where 'pattern' is the target keyword to search

---

q, Q, ZZ can exit less :x

vim has read only and write modes.
i can switch to write from read mode. partially right.. not completely

Ans. - 8

real — time for completion of whole task from start
user — time taken at user level (OS)
sys — time taken at system kernel level.

kill -9 -1: kill command sends signal number
9 to process id 1. Wrong

Ans. - 9

history | grep 'touch'
pwd: prints working directory
reboot: ~~shutdown~~ shutdown -r

Ans. - 10

-rw-r--r-- : (u-g-o) permissions   helloworld.txt: Filename
1 : number of links
eesha : user
Students : group
1389 : number of bytes
Mar 31 17:26 date modified

Vim is an editor to create or edit a text file.

There are two modes in vim. One is the command mode and another is the insert mode.

In the command mode, user can move around the file, delete text, etc.

In the insert mode, user can insert text.

From command mode **to** insert mode type a/A/i/I/o/O.

From insert mode **to** command mode type Esc

where real time is the time from start to finish of the call. It is the time from the moment you hit the Enter key until the moment the **task** command is completed.
user - amount of CPU time spent in **user mode**.
system or sys - amount of CPU time spent in **kernel mode**.

Answer to question no 08 - Second Part

kill -9 -1
which kill all processes you can kill.
-9 is alternate signal. (option)
PID -1 indicates all processes except the kill process itself and initial.
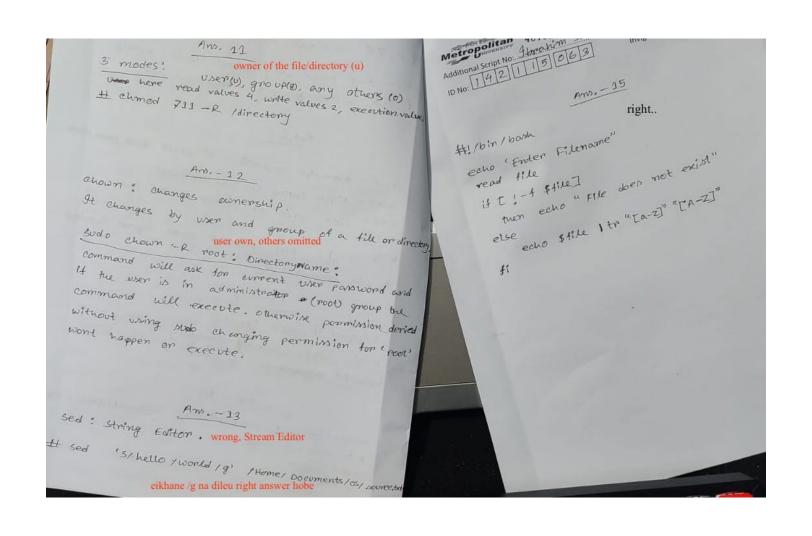Negative PID values may be used to choose whole process groups.

-rw-r--r-- 1 eesha eesha 1389 Mar 31 17:26 hellofile

where
1. first '-' represents the file type. "-" for a regular file, "d" for a directory, "l" for a symbolic link.
2. rw- represents user's permissions. Read, write, But no execution.

3. r- - represents group's permissions. Read Only.
4. r- - represents other's permissions. Read Only.
5. 1, number of hard links for the file.
6. eesha user.
7. eesha group.
8. 1389, size of the file in blocks. 1389 **byte** actually.
9. Mar 31 17:26 (last modified time)
10. hellofile, file name

Messenger

Ans. 11

3 modes:

~~User~~ here   user(u), group(g), any others (o)
                ~owner of the file/directory (u)~

read values 4, write values 2, execution values

chmod 711 -R /directory

Ans. - 12

chown : changes ownership.

It changes by user and group of a file or directory

~user own, others omitted~

sudo chown -R root : DirectoryName :

command will ask for current user password and
if the user is in administrator (root) group the
command will execute. otherwise permission denied
without using sudo changing permission for 'root'
wont happen or execute.

Ans. -13

sed : String Editor . ~wrong, Stream Editor~

sed 's/hello/world/g' /Home/Documents/os/source.txt

~eikhane /g na dileu right answer hobe~

Ans. -15

right..

```
#!/bin/bash
echo 'Enter Filename'
read file
if [ ! -f $file ]
then echo "File does not exist"
else
    echo $file | tr "[a-z]" "[A-Z]"
fi
```

Answer to question no 15

```
echo -n "Enter your filename"
read filename
if [ ! -f $filename]
     then echo "File doesn't exits"
exit 1
fi
command
tr '[a-z]' '[A-Z]' < $filename
```

```
echo "Enter a String"
read string
echo "Enter sub-string starting point to cut?"
read spoint
echo "Enter sub-string length?"
read length
echo {string:spoint:length}


14.b
echo "Enter a String"
read string
echo ${#string}
```