

1. Create in one command the directories ~/dir1/dir2/dir3 (dir3 is a subdirectory from dir2, and dir2 is a subdirectory from dir1)



amber@DESKTOP-21ETFMM: ~

```
amber@DESKTOP-21ETFMM:~$ mkdir -p dir1/dir2/dir3
amber@DESKTOP-21ETFMM:~$
```

2. Download some images from the Internet by linux commands



amber@DESKTOP-21ETFMM: ~

```
amber@DESKTOP-21ETFMM:~$ wget https://www.w3schools.com/html/img_chania.jpg
--2022-11-15 23:21:15-- https://www.w3schools.com/html/img_chania.jpg
Resolving www.w3schools.com (www.w3schools.com)... 192.229.179.87
Connecting to www.w3schools.com (www.w3schools.com)|192.229.179.87|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 45427 (44K) [image/jpeg]
Saving to: 'img_chania.jpg'

img_chania.jpg          100%[=====>] 44.36K  ---KB/s  in 0.02s
2022-11-15 23:21:15 (1.78 MB/s) - 'img_chania.jpg' saved [45427/45427]
```

7. Display the last 5 commands you typed.

```
amber@DESKTOP-21ETFMM:~$ history 5
31  clear
32  wget https://www.w3schools.com/html/pic_trulli.jpg
33  clear
34  wget https://www.w3schools.com/html/img_chania.jpg
35  history 5
amber@DESKTOP-21ETFMM:~$
```

8. Create the following files :

file1
file10
file11
file2
file2
file3
file33
fileAB
filea
fileA
fileAAA
file(
file 2

A. List (with ls) all files starting with file

```
@DESKTOP-21ETFMM:~/assignment$ ls file*  
2' 'file(' file1 file10 file11 file2 file3 file33 fileA fileAAA fileAB filea  
@DESKTOP-21ETFMM:~/assignment$
```

B. List (with ls) all files starting with file and ending in a number

```
amber@DESKTOP-21ETFMM:~/assignment$ ls file*[0-9]*  
'file 2' file1 file10 file11 file2 file3 file33  
amber@DESKTOP-21ETFMM:~/assignment$
```

C. List (with ls) all files starting with File and having a digit as the fifth character.

```
amber@DESKTOP-21ETFMM:~/assignment$ ls File[0-9]**  
ls: cannot access 'File[0-9]**': No such file or directory  
amber@DESKTOP-21ETFMM:~/assignment$
```

D. List (with ls) all files that have exactly five characters.

```
amber@DESKTOP-21ETFMM:~/assignment$ ls ?????  
'file('  file1  file2  file3  fileA  filea
```

E. List all files that do not start with the letter F.

```
amber@DESKTOP-21ETFMM:~/assignment$ ls [!F]*  
'file 2'  file1  file11  file3  fileA  fileAB  
'file('  file10  file2  file33  fileAAA  filea
```

9. Make a list of all filenames in /etc that contain the string conf in their filename

```
amber@DESKTOP-21ETFMM:~$ find /etc/*conf* -maxdepth 0 -type f
```

10. Make a sorted list of all files in /etc that contain the case insensitive string conf in their filename.

```
amber@DESKTOP-21ETFMM:~$ find /etc -maxdepth 1 -type f -iname "*COnf*" | sort
```

11. Display the calendar

```
amber@DESKTOP-21ETFMM:~$ cal
```

12. Translate all lowercase to uppercase in a file

```
amber@DESKTOP-21ETFMM:~$ tr 'A-Z' 'a-z' < test.txt
```

13. command to remove duplicates from a file

```
amber@DESKTOP-21ETFMM:~$ sort demo.txt | uniq
```

14. command to count the number of files in the current directory

```
amber@DESKTOP-21ETFMM:~$ ls -l | wc -l
```

15. Recursively set read, write, and execute permissions to the file owner and no permissions for all other users on a given directory.

```
amber@DESKTOP-21ETFMM:~$ chmod -R 700 demo.txt
```

16. Change the file permission of a file to read-only to the user and remove it for groups and others.

```
amber@DESKTOP-21ETFMM:~$ chmod 400 test.txt
```

17. Create a text file with some content in it, and also create a symbolic link

```
amber@DESKTOP-21ETFMM:~$ touch linkdemo.txt;ln -s linkdemo.txt link.txt
```

18. Command to show the contents of the file in hexadecimal bytes.

```
amber@DESKTOP-21ETFMM:~$ od test.txt
```

19. Create the given directories in one command (dir2, dir3, dir5 is a subdirectory of dir1 and dir4 is a subdirectory of dir3)

```
dir1
├─ dir2
├─ dir3
│   └─ dir4
└─ dir5
```

```
amber@DESKTOP-21ETFMM:~$ mkdir -p dir1/{dir2,dir3/dir4,dir5}
```

20. Display the first 10 commands from your history of commands.

```
amber@DESKTOP-21ETFMM:~$ history | head
```

21. Print the contents of the file in reverse order

```
amber@DESKTOP-21ETFMM:~$ tac demo.txt
```

22. Linux commands to restart and shutdown

To restart

```
amber@DESKTOP-21ETFMM:~$ sudo init 6
```

To shutdown

```
amber@DESKTOP-21ETFMM:~$ sudo init 0_
```