

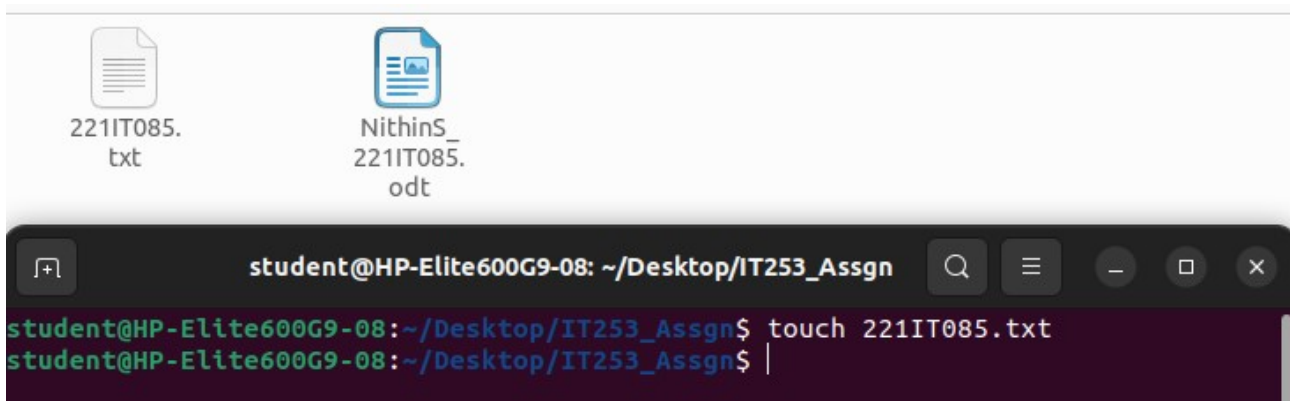
Nithin S
221IT085

IT253 Lab Assignment 1

Basic Linux Commands

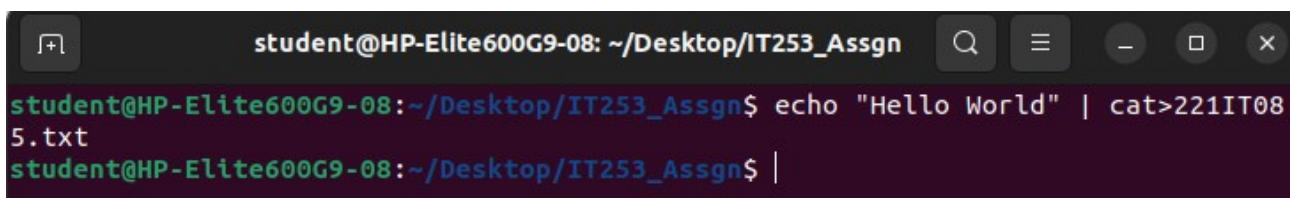
1. Creating a file

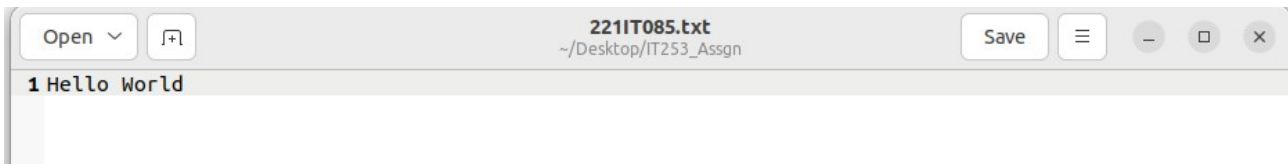
Use touch command to create a file.



2. Write to a file

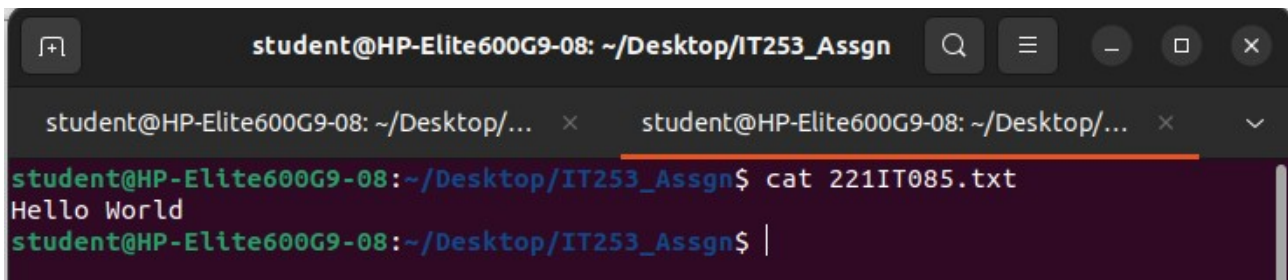
Use echo and cat command to write into a file.





3. View contents of a file

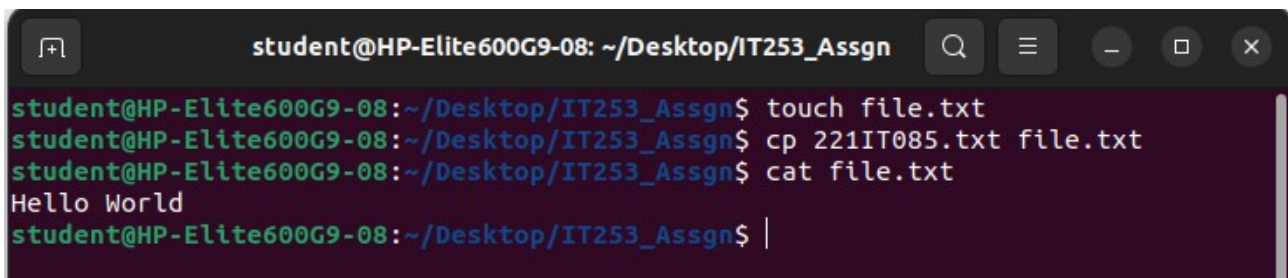
Use `cat` command to view file content.



4. Copy content from one file to another

Use `cp` command

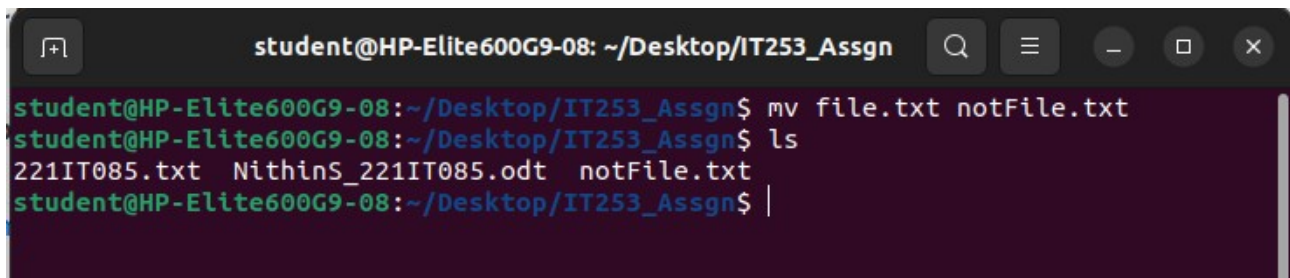
Syntax: `cp sourceFile destinationFile`



5. Renaming a file

Use mv command

Syntax: mv oldName newName

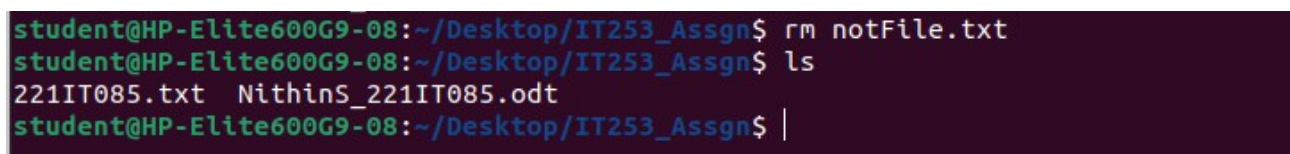
A terminal window titled 'student@HP-Elite600G9-08: ~/Desktop/IT253_Assgn' with standard window controls. The terminal shows the execution of the 'mv' command to rename 'file.txt' to 'notFile.txt', followed by an 'ls' command listing the directory contents.

```
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn$ mv file.txt notFile.txt
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn$ ls
221IT085.txt  NithinS_221IT085.odt  notFile.txt
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn$ |
```

6. Removing a file

Use rm command

Syntax: rm fileName

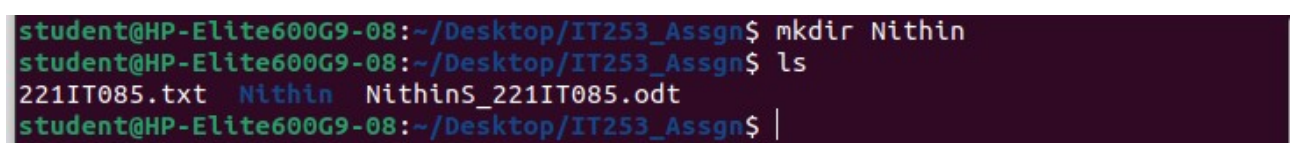
A terminal window titled 'student@HP-Elite600G9-08: ~/Desktop/IT253_Assgn' with standard window controls. The terminal shows the execution of the 'rm' command to remove 'notFile.txt', followed by an 'ls' command listing the directory contents.

```
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn$ rm notFile.txt
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn$ ls
221IT085.txt  NithinS_221IT085.odt
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn$ |
```

7. Creating a directory

Use mkdir command

Syntax: mkdir directoryName

A terminal window titled 'student@HP-Elite600G9-08: ~/Desktop/IT253_Assgn' with standard window controls. The terminal shows the execution of the 'mkdir' command to create a directory named 'Nithin', followed by an 'ls' command listing the directory contents.

```
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn$ mkdir Nithin
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn$ ls
221IT085.txt  Nithin  NithinS_221IT085.odt
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn$ |
```

8. Moving files into a directory

Use mv command

Syntax: mv file1 file2 dir1

```
student@HP-Elite600G9-08: ~/Desktop/IT253_Assgn/Nithin
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn$ touch new.txt
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn$ touch new1.txt
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn$ touch new2.txt
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn$ mv new.txt new1.txt new2.txt Nithin
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn$ cd Nithin
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn/Nithin$ ls
new1.txt  new2.txt  new.txt
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn/Nithin$ |
```

9. Copying files into a directory

Use cp command

Syntax: cp file1 file2 dir1

```
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn$ touch bruh.txt lol.txt
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn$ cp bruh.txt lol.txt Nithin
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn$ ls
221IT085.txt  bruh.txt  lol.txt  Nithin  NithinS_221IT085.odt
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn$ cd Nithin/
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn/Nithin$ ls
bruh.txt  lol.txt  new1.txt  new2.txt  new.txt
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn/Nithin$ |
```

10. Rename a directory

Use mv command

Syntax: mv oldName newName

```
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn$ ls
221IT085.txt bruh.txt lol.txt Nithin NithinS_221IT085.odt
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn$ mv Nithin NITHIN
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn$ ls
221IT085.txt bruh.txt lol.txt NITHIN NithinS_221IT085.odt
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn$ |
```

11. Copy files from one dir to another

Use cp command

Syntax: cp oldDir/* newDir

```
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn$ mkdir copy
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn$ cp NITHIN/* copy
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn$ cd copu
bash: cd: copu: No such file or directory
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn$ cd copy
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn/copy$ ls
bruh.txt lol.txt new1.txt new2.txt new.txt
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn/copy$ |
```

12. Move files from one dir to another

Use mv command

Syntax: mv oldDir/* newDir

```
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn$ mkdir copy
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn$ mv NITHIN/* copy
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn$ cd copy
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn/copy$ ls
bruh.txt lol.txt new1.txt new2.txt new.txt
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn/copy$ cd ..
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn$ cd NITHIN/
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn/NITHIN$ ls
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn/NITHIN$ |
```


13. Remove a directory

Use `rm -rf` command

Syntax: `rm -rf dirName`

```
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn$ ls
221IT085.txt bruh.txt copy lol.txt NITHIN NithinS_221IT085.odt
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn$ rm -rf copy
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn$ ls
221IT085.txt bruh.txt lol.txt NITHIN NithinS_221IT085.odt
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn$
```

14. List contents of a directory

Use `ls` command in the directory of choice

Syntax: `ls`

```
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn$ ls
221IT085.txt bruh.txt lol.txt NITHIN NithinS_221IT085.odt
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn$
```

15. pwd

To know present working directory

```
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn/NITHIN$ pwd
/home/student/Desktop/IT253_Assgn/NITHIN
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn/NITHIN$
```

16. cd

To change directory

```
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn/NITHIN$ pwd
/home/student/Desktop/IT253_Assgn/NITHIN
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn/NITHIN$ cd ..
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn$ cd NITHIN
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn/NITHIN$ |
```

17. List Command Variations with flags

ls -a : list all files including hidden file starting with '.'

```
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn/NITHIN$ ls -a
.  ..  bruh.txt  .git  lol.txt  new1.txt  new2.txt  new.txt
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn/NITHIN$ |
```

ls -d : list directories - with ' */'

```
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn/NITHIN$ ls -d
.
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn/NITHIN$ |
```

ls -F : add one char of */=>@| to enteries

```
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn/NITHIN$ ls -F
bruh.txt  lol.txt  new1.txt  new2.txt  new.txt
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn/NITHIN$ |
```

`ls -l` : list with long format - show permissions

```
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn/NITHIN$ ls -l
total 0
-rw-rw-r-- 1 student student 0 Jan  8 16:09 bruh.txt
-rw-rw-r-- 1 student student 0 Jan  8 16:09 lol.txt
-rw-rw-r-- 1 student student 0 Jan  8 16:06 new1.txt
-rw-rw-r-- 1 student student 0 Jan  8 16:06 new2.txt
-rw-rw-r-- 1 student student 0 Jan  8 16:06 new.txt
```

`ls -li` : list file's inode index number

```
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn/NITHIN$ ls -li
23598084 bruh.txt 23598081 new1.txt 23598068 new.txt
23598085 lol.txt 23598082 new2.txt
```

`ls -ls` : list file sizes

```
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn/NITHIN$ ls -ls
total 0
0 bruh.txt  0 lol.txt  0 new1.txt  0 new2.txt  0 new.txt
```

`ls -lt` : sort by time & date

```
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn/NITHIN$ ls -lt
bruh.txt  lol.txt  new2.txt  new1.txt  new.txt
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn/NITHIN$ |
```

`ls -S` : sort by file size

```
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn/NITHIN$ ls -S
bruh.txt  lol.txt  new1.txt  new2.txt  new.txt
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn/NITHIN$ |
```

`ls -r`: list in reverse order

```
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn/NITHIN$ ls -r
new.txt  new2.txt  new1.txt  lol.txt  bruh.txt
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn/NITHIN$ |
```


ls -ls: list with long format with file size

```
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn/NITHIN$ ls -ls
total 0
0 -rw-rw-r-- 1 student student 0 Jan  8 16:09 bruh.txt
0 -rw-rw-r-- 1 student student 0 Jan  8 16:09 lol.txt
0 -rw-rw-r-- 1 student student 0 Jan  8 16:06 new1.txt
0 -rw-rw-r-- 1 student student 0 Jan  8 16:06 new2.txt
0 -rw-rw-r-- 1 student student 0 Jan  8 16:06 new.txt
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn/NITHIN$ |
```

ls -lh: list long format with readable file size

```
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn/NITHIN$ ls -lh
total 0
-rw-rw-r-- 1 student student 0 Jan  8 16:09 bruh.txt
-rw-rw-r-- 1 student student 0 Jan  8 16:09 lol.txt
-rw-rw-r-- 1 student student 0 Jan  8 16:06 new1.txt
-rw-rw-r-- 1 student student 0 Jan  8 16:06 new2.txt
-rw-rw-r-- 1 student student 0 Jan  8 16:06 new.txt
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn/NITHIN$ |
```

ls -la: list long format including hidden files

```
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn/NITHIN$ ls -la
total 12
drwxrwxr-x 3 student student 4096 Jan  8 16:32 .
drwxrwxr-x 4 student student 4096 Jan  8 16:31 ..
-rw-rw-r-- 1 student student  0 Jan  8 16:09 bruh.txt
drwxrwxr-x 7 student student 4096 Jan  8 16:32 .git
-rw-rw-r-- 1 student student  0 Jan  8 16:09 lol.txt
-rw-rw-r-- 1 student student  0 Jan  8 16:06 new1.txt
-rw-rw-r-- 1 student student  0 Jan  8 16:06 new2.txt
-rw-rw-r-- 1 student student  0 Jan  8 16:06 new.txt
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn/NITHIN$ |
```

ls -X: sort by extension name

```
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn/NITHIN$ ls -X
bruh.txt lol.txt new1.txt new2.txt new.txt
student@HP-Elite600G9-08:~/Desktop/IT253_Assgn/NITHIN$ |
```