


# COS


## Assignment-1

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1.  cdac@OWAIS-PC: ~/LinuxAssginment1


```
cdac@OWAIS-PC:~$ pwd
/home/cdac
cdac@OWAIS-PC:~$ mkdir LinuxAssginment1
cdac@OWAIS-PC:~$ pwd
/home/cdac
cdac@OWAIS-PC:~$ cd LinuxAssginment1/
cdac@OWAIS-PC:~/LinuxAssginment1$ pwd
/home/cdac/LinuxAssginment1
cdac@OWAIS-PC:~/LinuxAssginment1$ _
```

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2.  cdac@OWAIS-PC: ~/LinuxAssginment1


```
cdac@OWAIS-PC:~/LinuxAssginment1$ touch file1.txt
cdac@OWAIS-PC:~/LinuxAssginment1$ cat file1.txt
cdac@OWAIS-PC:~/LinuxAssginment1$ nano file1.txt
cdac@OWAIS-PC:~/LinuxAssginment1$ cat file1.txt
y name is Owais Sk
cdac@OWAIS-PC:~/LinuxAssginment1$ _
```

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3.  cdac@OWAIS-PC: ~/LinuxAssignment


```
cdac@OWAIS-PC:~/LinuxAssignment$ mkdir docs
cdac@OWAIS-PC:~/LinuxAssignment$ ls
docs  myfile1.txt
cdac@OWAIS-PC:~/LinuxAssignment$ _
```

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4.  cdac@OWAIS-PC: ~/LinuxAssginment1/docs

```
cdac@OWAIS-PC:~/LinuxAssginment1$ cp file1.txt docs/
cdac@OWAIS-PC:~/LinuxAssginment1$ cd docs
cdac@OWAIS-PC:~/LinuxAssginment1/docs$ ls
file1.txt
s and more (Alt+F) ~/LinuxAssginment1/docs$ mv file1.txt file2.txt
cdac@OWAIS-PC:~/LinuxAssginment1/docs$ ls
file2.txt
cdac@OWAIS-PC:~/LinuxAssginment1/docs$
```


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5.  cdac@OWAIS-PC: ~/LinuxAssginment1/docs


```
cdac@OWAIS-PC:~/LinuxAssginment1/docs$ ls -l file2.txt
-rw-r--r-- 1 cdac cdac 20 Feb 27 17:47 file2.txt
cdac@OWAIS-PC:~/LinuxAssginment1/docs$ chmod u+x file2.txt
cdac@OWAIS-PC:~/LinuxAssginment1/docs$ ls -l file2.txt
-rwxr--r-- 1 cdac cdac 20 Feb 27 17:47 file2.txt
cdac@OWAIS-PC:~/LinuxAssginment1/docs$ chown $(whoami) file2.txt
cdac@OWAIS-PC:~/LinuxAssginment1/docs$ ls -l
total 4
-rwxr--r-- 1 cdac cdac 20 Feb 27 17:47 file2.txt
cdac@OWAIS-PC:~/LinuxAssginment1/docs$
```

6.  cdac@OWAIS-PC: ~/LinuxAssginment1


```
cdac@OWAIS-PC:~/LinuxAssginment1/docs$ cd ..
cdac@OWAIS-PC:~/LinuxAssginment1$ ls
docs  file1.txt
cdac@OWAIS-PC:~/LinuxAssginment1$
```

7.  cdac@OWAIS-PC: ~


```
cdac@OWAIS-PC:~/LinuxAssginment1$ cd
cdac@OWAIS-PC:~$ ls
CP LinuxAssginment1 myfile sh1 sh3
cdac@OWAIS-PC:~$ find . -type f -name "*.txt"
./LinuxAssginment1/docs/file2.txt
./LinuxAssginment1/file1.txt
cdac@OWAIS-PC:~$
```

8.  cdac@OWAIS-PC: ~/LinuxAssginment1


```
cdac@OWAIS-PC:~/LinuxAssginment1$ grep -n "am" file1.txt
1:My name is Owais Sk
cdac@OWAIS-PC:~/LinuxAssginment1$ grep -ni 'i' file1.txt
>
>
> ^C
cdac@OWAIS-PC:~/LinuxAssginment1$ grep -n "i" file1.txt
1:My name is Owais Sk
cdac@OWAIS-PC:~/LinuxAssginment1$
```

9.  cdac@OWAIS-PC: ~/LinuxAssginment1

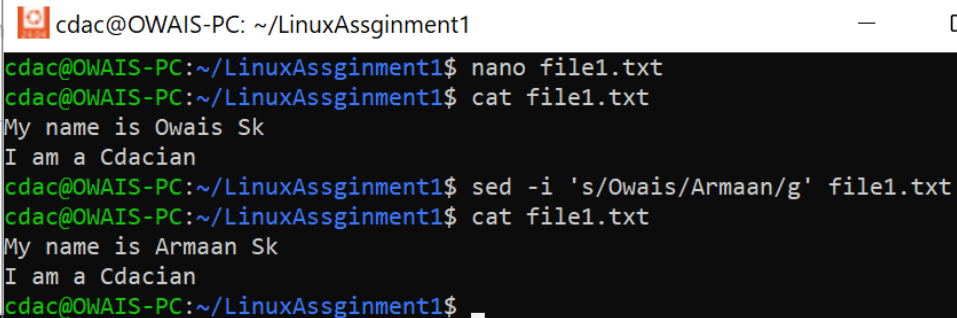
```
cdac@OWAIS-PC:~/LinuxAssginment1$ date
Thu Feb 27 18:00:02 UTC 2025
cdac@OWAIS-PC:~/LinuxAssginment1$
```


10.  cdac@OWAIS-PC: ~/LinuxAssginment1

```
Get:1 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 unzip amd64 6.0-28ubuntu4.1 [174 kB]
Get:2 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 zip amd64 3.0-13ubuntu0.2 [176 kB]
Fetched 350 kB in 2s (221 kB/s)
Selecting previously unselected package unzip.
(Reading database ... 40802 files and directories currently installed.)
Preparing to unpack .../unzip_6.0-28ubuntu4.1_amd64.deb ...
Unpacking unzip (6.0-28ubuntu4.1) ...
Selecting previously unselected package zip.
Preparing to unpack .../zip_3.0-13ubuntu0.2_amd64.deb ...
Unpacking zip (3.0-13ubuntu0.2) ...
Setting up unzip (6.0-28ubuntu4.1) ...
Setting up zip (3.0-13ubuntu0.2) ...
Processing triggers for man-db (2.12.0-4build2) ...
cdac@OWAIS-PC:~/LinuxAssginment1$ zip -r docs.zip docs
  adding: docs/ (stored 0%)
  adding: docs/file2.txt (stored 0%)
cdac@OWAIS-PC:~/LinuxAssginment1$ unzip docs.zip -d newdoc
Archive: docs.zip
  creating: newdoc/docs/
  extracting: newdoc/docs/file2.txt
cdac@OWAIS-PC:~/LinuxAssginment1$
```

11.  cdac@OWAIS-PC: ~/LinuxAssginment1

```
cdac@OWAIS-PC:~/LinuxAssginment1$ nano file1.txt
cdac@OWAIS-PC:~/LinuxAssginment1$ cat file1.txt
My name is Owais Sk
I am a Cdacian
cdac@OWAIS-PC:~/LinuxAssginment1$
```



 cdac@OWAIS-PC: ~/LinuxAssginment1

```
cdac@OWAIS-PC:~/LinuxAssginment1$ nano file1.txt
cdac@OWAIS-PC:~/LinuxAssginment1$ cat file1.txt
My name is Owais Sk
I am a Cdacian
cdac@OWAIS-PC:~/LinuxAssginment1$ sed -i 's/Owais/Armaan/g' file1.txt
cdac@OWAIS-PC:~/LinuxAssginment1$ cat file1.txt
My name is Armaan Sk
I am a Cdacian
cdac@OWAIS-PC:~/LinuxAssginment1$
```

... 

## Problem 2

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```
cdac@OWAIS-PC: ~/LinuxAssginment1/Problem2
cdac@OWAIS-PC:~/LinuxAssginment1$ mkdir Problem2
cdac@OWAIS-PC:~/LinuxAssginment1$ cd Problem2/
cdac@OWAIS-PC:~/LinuxAssginment1/Problem2$ touch data.txt
cdac@OWAIS-PC:~/LinuxAssginment1/Problem2$ nano data.txt
cdac@OWAIS-PC:~/LinuxAssginment1/Problem2$ head -n 10 data.txt
India
Bangladesh
Bhutan
Pakistan
Afghanistan
Russia
Srilanka
Austria
Japan
Indonesia
1. cdac@OWAIS-PC:~/LinuxAssginment1/Problem2$
```

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```
cdac@OWAIS-PC:~/LinuxAssginment1/Problem2$ tail -n 5 data.txt
Brazil
Africa
USA
UK
Germany
2. cdac@OWAIS-PC:~/LinuxAssginment1/Problem2$
```

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```
cdac@OWAIS-PC: ~/LinuxAssginment1/Problem2
cdac@OWAIS-PC:~/LinuxAssginment1/Problem2$ touch numbers.txt
cdac@OWAIS-PC:~/LinuxAssginment1/Problem2$ nano numbers.txt
cdac@OWAIS-PC:~/LinuxAssginment1/Problem2$ head -16 numbers.txt
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
3. cdac@OWAIS-PC:~/LinuxAssginment1/Problem2$
```

---

```
cdac@OWAIS-PC:~/LinuxAssginment1/Problem2$ tail -3 numbers.txt
23
24
25
4. cdac@OWAIS-PC:~/LinuxAssginment1/Problem2$
```

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```
cdac@OWAIS-PC: ~/LinuxAssginment1/Problem2
shail
umesh
rahul
saif
haris
komal
nikita
rohit
faizan
cdac@OWAIS-PC:~/LinuxAssginment1/Problem2$ cat output.txt
OWAIS
SHAIL
UMESH
RAHUL
SAIF
HARIS
KOMAL
NIKITA
ROHIT
FAIZAN
5. cdac@OWAIS-PC:~/LinuxAssginment1/Problem2$
```

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```
cdac@OWAIS-PC: ~/LinuxAssginment1/Problem2
C++
C++
Python
Nodejs
Nodejs
cdac@OWAIS-PC:~/LinuxAssginment1/Problem2$ cat duplicate.txt | sort | unique
Command 'unique' not found, but can be installed with:
sudo apt install john
cdac@OWAIS-PC:~/LinuxAssginment1/Problem2$ cat duplicate.txt | sort | uniq
C
C++
GoLang
Java
Nodejs
Python
React
Scala
Swift
6. cdac@OWAIS-PC:~/LinuxAssginment1/Problem2$
```

---

```
cdac@OWAIS-PC: ~/LinuxAssginment1/Problem2
cdac@OWAIS-PC:~/LinuxAssginment1/Problem2$ nano fruit.txt
cdac@OWAIS-PC:~/LinuxAssginment1/Problem2$ cat fruit.txt
mango
mango
mango
lichi
lichi
sweet lime
apple
apple
kiwi
kiwi
kiwi
kiwi
orange
blueberry
orange
orange
banana
banana
cdac@OWAIS-PC:~/LinuxAssginment1/Problem2$ cat fruit.txt | sort | uniq -c
      1 apple
      1 apple
      2 banana
      1 blueberry
      4 kiwi
      2 lichi
      3 mango
      3 orange
      1 sweet lime
cdac@OWAIS-PC:~/LinuxAssginment1/Problem2$
```

7.

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