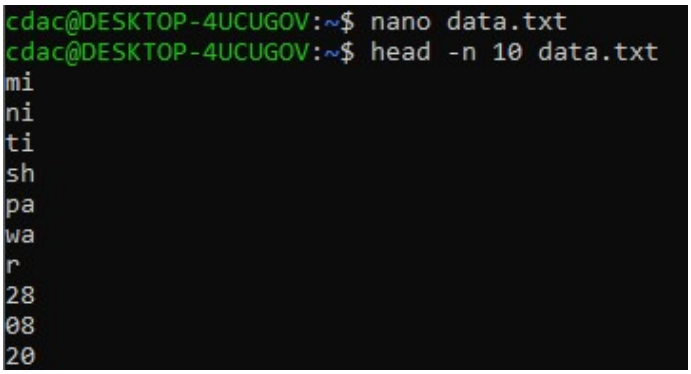
Problem 2: Assignment os 1

Sunday, March 2, 2025 8:06 AM

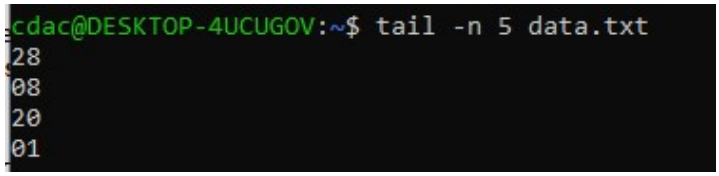
1)Suppose you have a file named "data.txt" containing important information. Display the first 10 lines of this file to quickly glance at its contents using a command.

```
cdac@DESKTOP-4UCUGOV:~$ nano data.txt
cdac@DESKTOP-4UCUGOV:~$ head -n 10 data.txt
mi
ni
ti
sh
pa
wa
r
28
08
20
```



2)Now, to check the end of the file for any recent additions, display the last 5 lines of "data.txt" using another command.

```
cdac@DESKTOP-4UCUGOV:~$ tail -n 5 data.txt
28
08
20
01
```



3)In a file named "numbers.txt," there are a series of numbers. Display the first 15 lines of this file to analyze the initial data set.

```
cdac@DESKTOP-4UCUGOV:~$ cat numbers.txt
cat: numbers.txt: No such file or directory
cdac@DESKTOP-4UCUGOV:~$ nano numbers.txt
cdac@DESKTOP-4UCUGOV:~$ head -15 numbers.txt
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
```

```
cdac@DESKTOP-4UCUGOV:~$ nano numbers.txt
cdac@DESKTOP-4UCUGOV:~$ head -15 numbers.txt
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
```

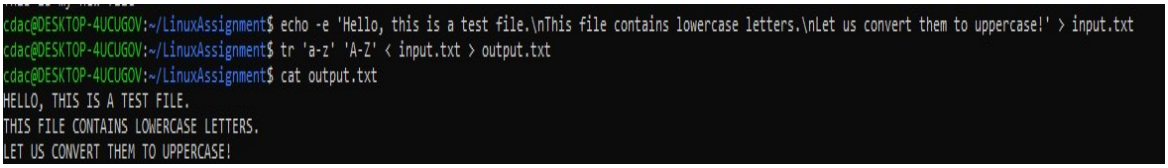
4)To focus on the last few numbers of the dataset, display the last 3 lines of "numbers.txt".

```
cdac@DESKTOP-4UCUGOV:~$ tail -3 numbers.txt
18
10
20
```

```
cdac@DESKTOP-4UCUGOV:~$ tail -3 numbers.txt
18
10
20
```

5)Imagine you have a file named "input.txt" with text content. Use a command to translate all lowercase letters to uppercase in "input.txt" and save the modified text in a new file named "output.txt."

```
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ echo -e 'Hello, this is a test file.\nThis file contains lowercase letters.\nLet us convert them to uppercase!' > input.txt
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ tr 'a-z' 'A-Z' < input.txt > output.txt
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ cat output.txt
HELLO, THIS IS A TEST FILE.
THIS FILE CONTAINS LOWERCASE LETTERS.
LET US CONVERT THEM TO UPPERCASE!
```



6)In a file named "duplicate.txt," there are several lines of text, some of which are duplicates. Use a command to display only the unique lines from "duplicate.txt."

cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ echo -e 'Hello, World!\nThis is a test.
\nHello, World!\nLinux is great.\nThis is a test.\nUnique line here. ' > duplicate.txt
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ sort duplicate.txt | uniq
Hello, World!
Linux is great.
This is a test.
This is a test.
Unique line here.

```
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ echo -e 'Hello, World!\nThis is a test. \nHello, World!\nLinux is great.\nThis is a test.\nUnique line here. ' > duplicate.txt
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ sort duplicate.txt | uniq
Hello, World!
Linux is great.
This is a test.
This is a test.
Unique line here.
```

7)In a file named "fruit.txt," there is a list of fruits, but some fruits are repeated. Use a command to display each unique fruit along with the count of its occurrences in "fruit.txt."

```
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ echo -e 'apple\nbanana\napple\norange
\nbanana\ngrape\napple\norange\ngrape\ngrape' > fruit.txt
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ sort fruits.txt | uniq -c
sort: cannot read: fruits.txt: No such file or directory
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ sort fruit.txt | uniq -c
      3 apple
      2 banana
      3 grape
      2 orange
```