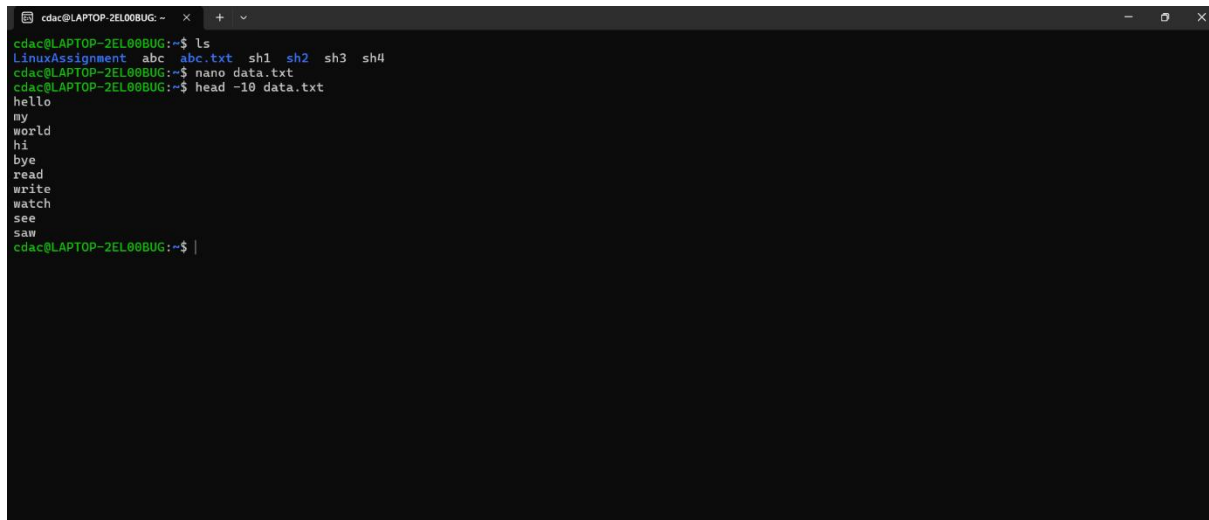
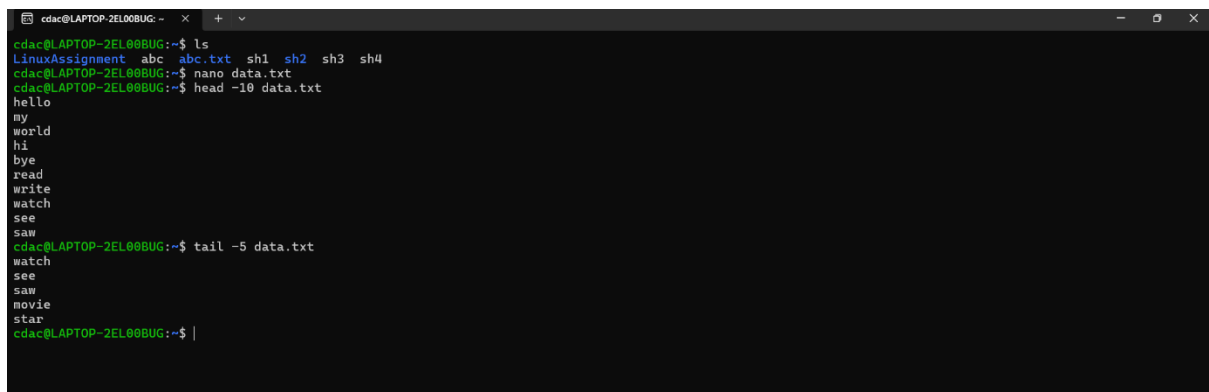


a. Suppose you have a file named "data.txt" containing important information. Display the first 10 lines of this file to quickly glance at its contents using a command.

A terminal window titled 'cdac@LAPTOP-2EL00BUG: ~' with a dark background. The user has executed a series of commands: 'ls' showing a directory listing including 'LinuxAssignment', 'abc', 'abc.txt', 'sh1', 'sh2', 'sh3', and 'sh4'; 'nano data.txt' to create a new file; and 'head -10 data.txt' to display the first 10 lines of the file. The output of the head command shows the following text: 'hello', 'my', 'world', 'hi', 'bye', 'read', 'write', 'watch', 'see', and 'saw'. The prompt is now 'cdac@LAPTOP-2EL00BUG:~\$ |'.

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

A terminal window titled 'cdac@LAPTOP-2EL00BUG: ~' with a dark background. The user has executed the same sequence of commands as in the previous screenshot: 'ls', 'nano data.txt', and 'head -10 data.txt'. The output of the head command is visible. Then, the user has entered the command 'tail -5 data.txt' to view the last 5 lines of the file. The output shows the last five lines of the file: 'watch', 'see', 'saw', 'movie', and 'star'. The prompt is now 'cdac@LAPTOP-2EL00BUG:~\$ |'.

c. 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.

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

```
cdac@LAPTOP-2EL00BUG: ~$ nano numbers.txt
cdac@LAPTOP-2EL00BUG:~$ head -15 numbers.txt
1
2
3
4
3
5
4
5
8
4
2
0
7
3
5
cdac@LAPTOP-2EL00BUG:~$ tail -3 numbers.txt
3
1
1
cdac@LAPTOP-2EL00BUG:~$ nano numbers.txt
cdac@LAPTOP-2EL00BUG:~$ tail -3 numbers.txt
3
1
1
cdac@LAPTOP-2EL00BUG:~$ |
```

e. 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@LAPTOP-2EL00BUG: ~/LinuxAssignment$ nano input.txt
cdac@LAPTOP-2EL00BUG:~/LinuxAssignment$ cat input.txt
hello
my
world
good
morning
my
name
is
amit
cdac@LAPTOP-2EL00BUG:~/LinuxAssignment$ tr '[:lower:]' '[:upper:]' < input.txt > output.txt
cdac@LAPTOP-2EL00BUG:~/LinuxAssignment$ cat output.txt
HELLO
MY
WORLD
GOOD
MORNING
MY
NAME
IS
AMIT
cdac@LAPTOP-2EL00BUG:~/LinuxAssignment$ |
```

f. 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@LAPTOP-2EL00BUG: ~/LinuxAssignment$ ls
docs      extracted_docs  file1.txt  input.txt
docs.zip  file.txt       file2.txt  output.txt
cdac@LAPTOP-2EL00BUG:~/LinuxAssignment$ nano duplicate.txt
cdac@LAPTOP-2EL00BUG:~/LinuxAssignment$ sort duplicate.txt | uniq
bye
evening
hello
morning
sunny
world
cdac@LAPTOP-2EL00BUG:~/LinuxAssignment$ cat duplicate.txt
hello
hello
bye
bye
world
evening
sunny
morning
sunny
cdac@LAPTOP-2EL00BUG:~/LinuxAssignment$ sort duplicate.txt | uniq
bye
evening
hello
morning
sunny
world
cdac@LAPTOP-2EL00BUG:~/LinuxAssignment$ |
```

g. 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@LAPTOP-2EL00BUG:~/LinuxAssignment$ ls
docs      duplicate.txt  file.txt  file2.txt  output.txt
docs.zip  extracted_docs file1.txt  input.txt
cdac@LAPTOP-2EL00BUG:~/LinuxAssignment$ nano fruit.txt
cdac@LAPTOP-2EL00BUG:~/LinuxAssignment$ cat fruit.txt
orange
apple
apple
mango
mango
watermelon
strawberry
lichi
lichi
cdac@LAPTOP-2EL00BUG:~/LinuxAssignment$ ^C
cdac@LAPTOP-2EL00BUG:~/LinuxAssignment$ ^C
cdac@LAPTOP-2EL00BUG:~/LinuxAssignment$ sort fruit.txt | uniq -c | sort -nr
  2 mango
  2 lichi
  2 apple
  1 watermelon
  1 strawberry
  1 orange
cdac@LAPTOP-2EL00BUG:~/LinuxAssignment$ |
```