Problem 2:

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.

Ans :

cdac@Prashant:~/LinuxAssignment$ pwd

/home/cdac/LinuxAssignment

cdac@Prashant:~/LinuxAssignment$ ls

cdac@Prashant:~/LinuxAssignment$ touch data.txt

cdac@Prashant:~/LinuxAssignment$ cat data.txt

cdac@Prashant:~/LinuxAssignment$ nano data.txt

cdac@Prashant:~/LinuxAssignment$ cat data.txt

Hello

My

Name

Is

Prashant

Asaram

Musale.

I'm

a

ENTC

Engineer

And

I'm

from

Chatrapati

Sambhajinagar

cdac@Prashant:~/LinuxAssignment$ head -10 data.txt

Hello

My

Name

Is

Prashant

Asaram

Musale.

I'm

a

ENTC

cdac@Prashant:~/LinuxAssignment$

```
cdac@Prashant:~/LinuxAssignment$ pwd
/home/cdac/LinuxAssignment
cdac@Prashant:~/LinuxAssignment$ ls
cdac@Prashant:~/LinuxAssignment$ touch data.txt
cdac@Prashant:~/LinuxAssignment$ cat data.txt
cdac@Prashant:~/LinuxAssignment$ nano data.txt
cdac@Prashant:~/LinuxAssignment$ cat data.txt
Hello
My
Name
Is
Prashant
Asaram
Musale.
I'm
a
ENTC
Engineer
And
I'm
from
Chatrapati
Sambhajinagar
cdac@Prashant:~/LinuxAssignment$ head -10 data.txt
Hello
My
Name
Is
Prashant
Asaram
Musale.
I'm
a
ENTC
cdac@Prashant:~/LinuxAssignment$
```

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

Ans:

cdac@Prashant:~/LinuxAssignment$ cat data.txt

Hello

My

Name

Is

Prashant

Asaram

Musale.

I'm

a

ENTC

Engineer

And

I'm

from

Chatrapati

Sambhajinagar

cdac@Prashant:~/LinuxAssignment$ tail -5 data.txt

And

I'm

from

Chatrapati

Sambhajinagar

cdac@Prashant:~/LinuxAssignment$

```
cdac@Prashant:~/LinuxAssignment$ cat data.txt
Hello
My
Name
Is
Prashant
Asaram
Musale.
I'm
a
ENTC
Engineer
And
I'm
from
Chatrapati
Sambhajinagar
cdac@Prashant:~/LinuxAssignment$ tail -5 data.txt
And
I'm
from
Chatrapati
Sambhajinagar
cdac@Prashant:~/LinuxAssignment$
```

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.

Ans:

cdac@Prashant:~/LinuxAssignment$ nano numbers.txt

cdac@Prashant:~/LinuxAssignment$ cat numbers.txt

1

9

2

8

3

```
7
4
6
5
5
1
2
3
4
5
6
7
8
9
0
cdac@Prashant:~/LinuxAssignment$ head -15 numbers.txt
1
9
2
8
3
7
4
6
5
5
```

1

2

3

4

5

cdac@Prashant:~/LinuxAssignment$

```
cdac@Prashant:~/LinuxAssignment$ nano numbers.txt
cdac@Prashant:~/LinuxAssignment$ cat numbers.txt
1
9
2
8
3
7
4
6
5
5
1
2
3
4
5
6
7
8
9
0
cdac@Prashant:~/LinuxAssignment$ head -15 numbers.txt
1
9
2
8
3
7
4
6
5
5
1
2
3
4
5
cdac@Prashant:~/LinuxAssignment$
```
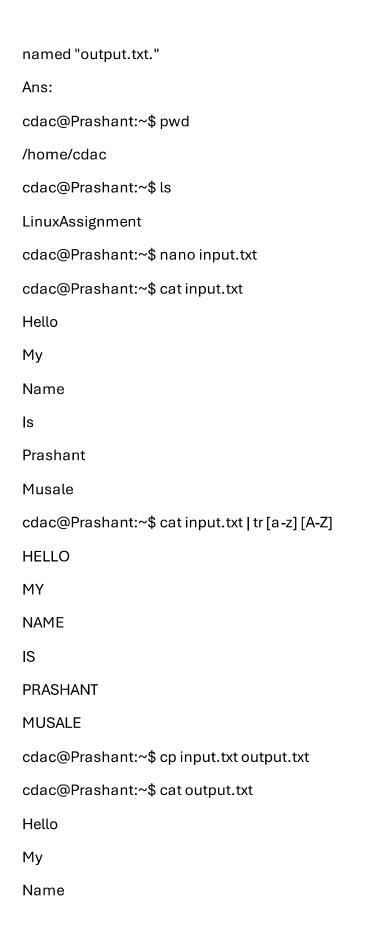
d. To focus on the last few numbers of the dataset, display the last 3 lines of "numbers.txt".

Ans:

cdac@Prashant:~/LinuxAssignment$ cat numbers.txt

1

9

2

8

3

7

4

6

5

5

1

2

3

4

5

6

7

8

9

0

cdac@Prashant:~/LinuxAssignment$ tail -3 numbers.txt

8

9

0

cdac@Prashant:~/LinuxAssignment$

```
cdac@Prashant:~/LinuxAssignment$ cat numbers.txt
1
9
2
8
3
7
4
6
5
5
1
2
3
4
5
6
7
8
9
0
cdac@Prashant:~/LinuxAssignment$ tail -3 numbers.txt
8
9
0
cdac@Prashant:~/LinuxAssignment$
```

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."

Ans:

cdac@Prashant:~$ pwd

/home/cdac

cdac@Prashant:~$ ls

LinuxAssignment

cdac@Prashant:~$ nano input.txt

cdac@Prashant:~$ cat input.txt

Hello

My

Name

Is

Prashant

Musale

cdac@Prashant:~$ cat input.txt | tr [a-z] [A-Z]

HELLO

MY

NAME

IS

PRASHANT

MUSALE

cdac@Prashant:~$ cp input.txt output.txt
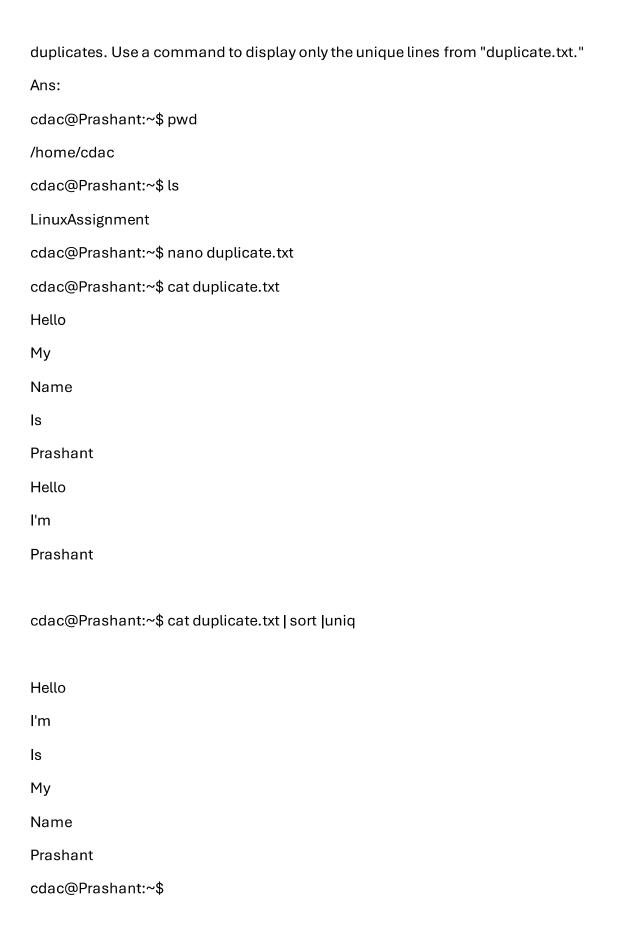
cdac@Prashant:~$ cat output.txt

Hello

My

Name

Is

Prashant

Musale

cdac@Prashant:~$

```
cdac@Prashant:~$ pwd
/home/cdac
cdac@Prashant:~$ ls
LinuxAssignment
cdac@Prashant:~$ nano input.txt
cdac@Prashant:~$ cat input.txt
Hello
My
Name
Is
Prashant
Musale
cdac@Prashant:~$ cat input.txt | tr [a-z] [A-Z]
HELLO
MY
NAME
IS
PRASHANT
MUSALE
cdac@Prashant:~$ cp input.txt output.txt
cdac@Prashant:~$ cat output.txt
Hello
My
Name
Is
Prashant
Musale
cdac@Prashant:~$
```

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."

Ans:

cdac@Prashant:~$ pwd

/home/cdac

cdac@Prashant:~$ ls

LinuxAssignment

cdac@Prashant:~$ nano duplicate.txt

cdac@Prashant:~$ cat duplicate.txt

Hello

My

Name

Is

Prashant

Hello

I'm

Prashant

cdac@Prashant:~$ cat duplicate.txt | sort |uniq

Hello

I'm

Is

My

Name

Prashant

cdac@Prashant:~$

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."

Ans:

cdac@Prashant:~$ pwd

/home/cdac

cdac@Prashant:~$ ls

LinuxAssignment

```
cdac@Prashant:~$ nano fruits.txt

cdac@Prashant:~$ cat fruits.txt

Apple

Mango

Strawberries

Pineapple

Grape

Mango

Watermelon

Kiwi

Papya

Mango

Grape

Pineapple

Mango

Kiwi

Apple

Mango

cdac@Prashant:~$ cat fruits.txt | tr -cd 'n\t\r' | sort | uniq -c

      1 nnnnnnnn

cdac@Prashant:~$ cat fruits.txt | sort | uniq -c

      2 Apple

      2 Grape

      2 Kiwi

      5 Mango

      1 Papya
```

2 Pineapple

1 Strawberries

1 Watermelon

cdac@Prashant:~$

```
cdac@Prashant:~$ pwd
/home/cdac
cdac@Prashant:~$ ls
LinuxAssignment
cdac@Prashant:~$ nano fruits.txt
cdac@Prashant:~$ cat fruits.txt
Apple
Mango
Strawberries
Pineapple
Grape
Mango
Watermelon
Kiwi
Papya
Mango
Grape
Pineapple
Mango
Kiwi
Apple
Mango
cdac@Prashant:~$ cat fruits.txt | tr -cd 'n\t\r' | sort | uniq -c
      1 nnnnnnnn
cdac@Prashant:~$ cat fruits.txt | sort | uniq -c
      2 Apple
      2 Grape
      2 Kiwi
      5 Mango
      1 Papya
      2 Pineapple
      1 Strawberries
      1 Watermelon
cdac@Prashant:~$
```