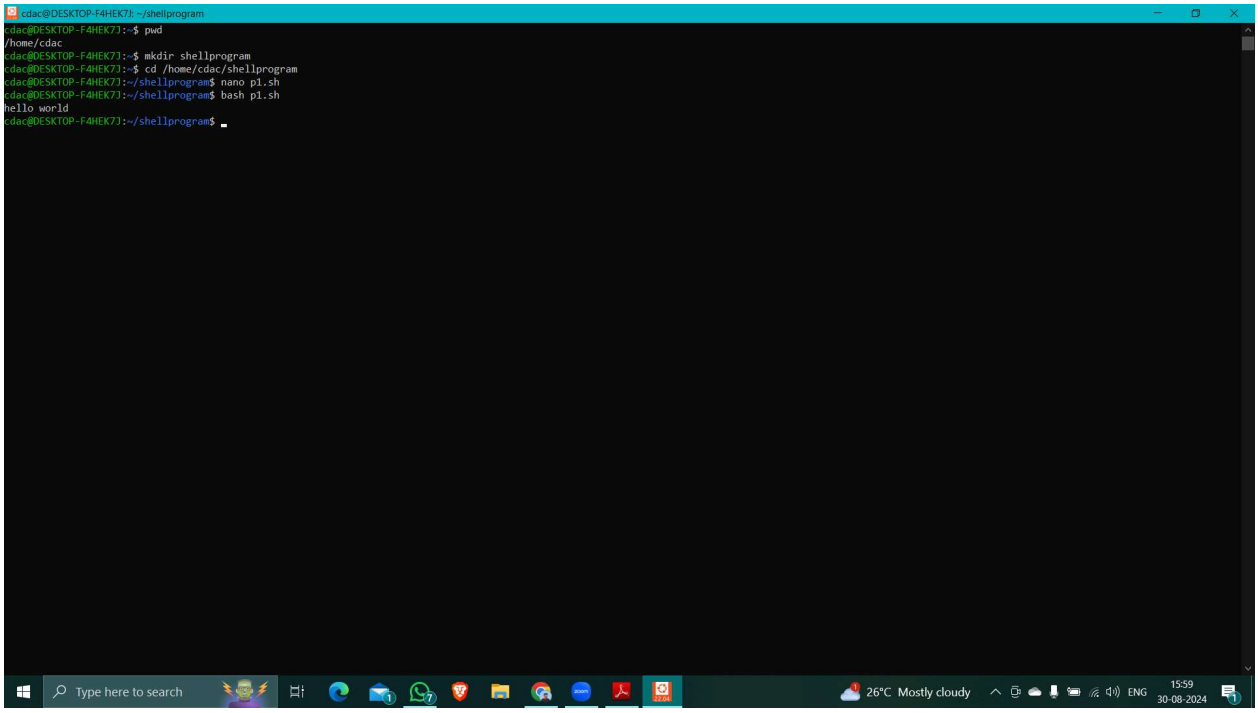
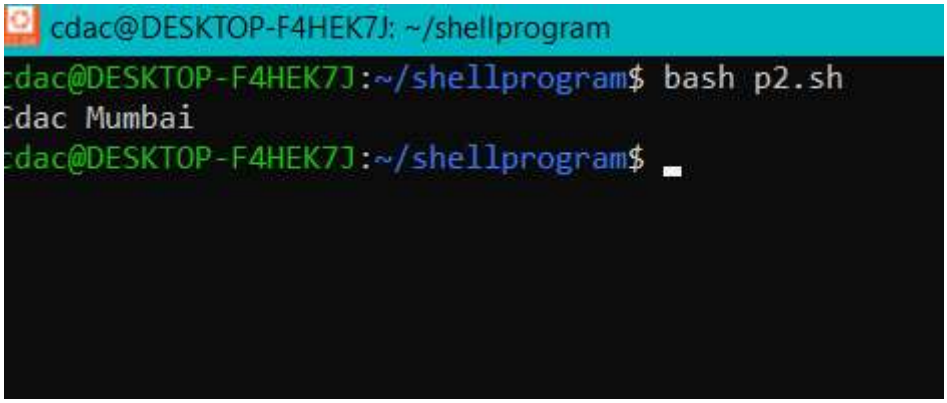
Assignment -2 OS

Part c

Question 1: Write a shell script that prints "Hello, World!" to the terminal.

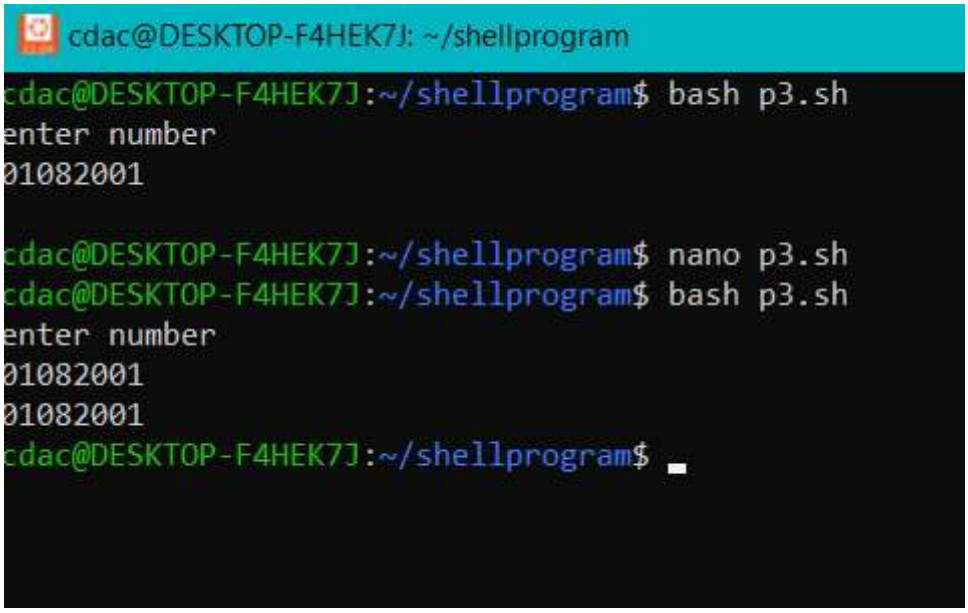


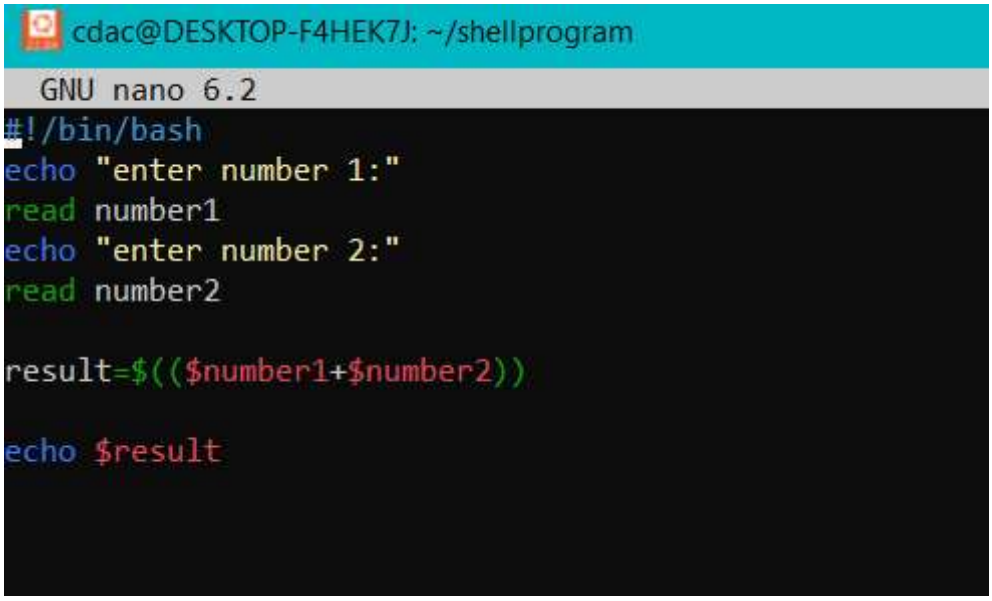
Question 2: Declare a variable named "name" and assign the value "CDAC Mumbai" to it. Print the value of the variable.



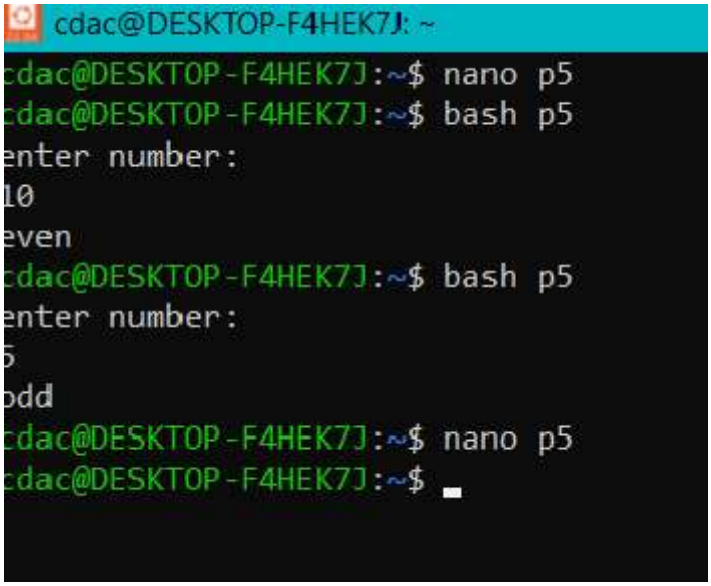
Question 3: Write a shell script that takes a number as input from the user and prints it.

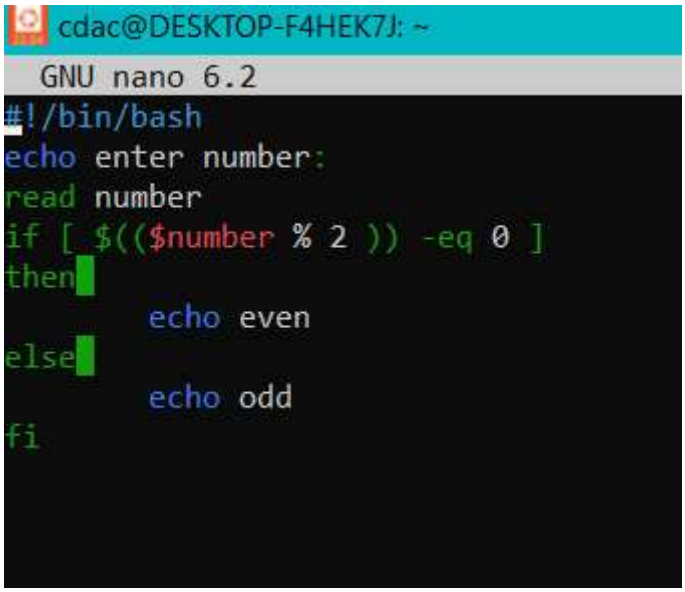
Question 4: Write a shell script that performs addition of two numbers (e.g., 5 and 3) and prints the result.



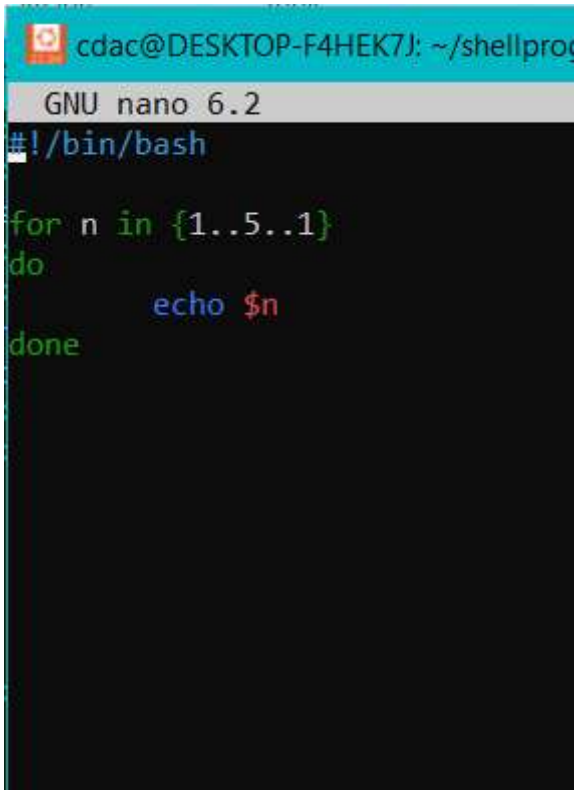


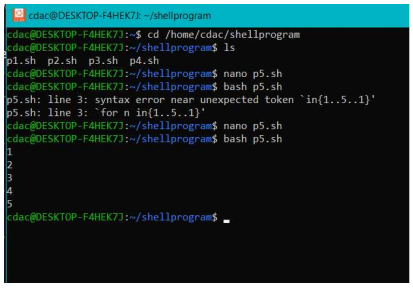
Question 5: Write a shell script that takes a number as input and prints "Even" if it is even, otherwise
prints "Odd".





Question 6: Write a shell script that uses a for loop to print numbers from 1 to 5.



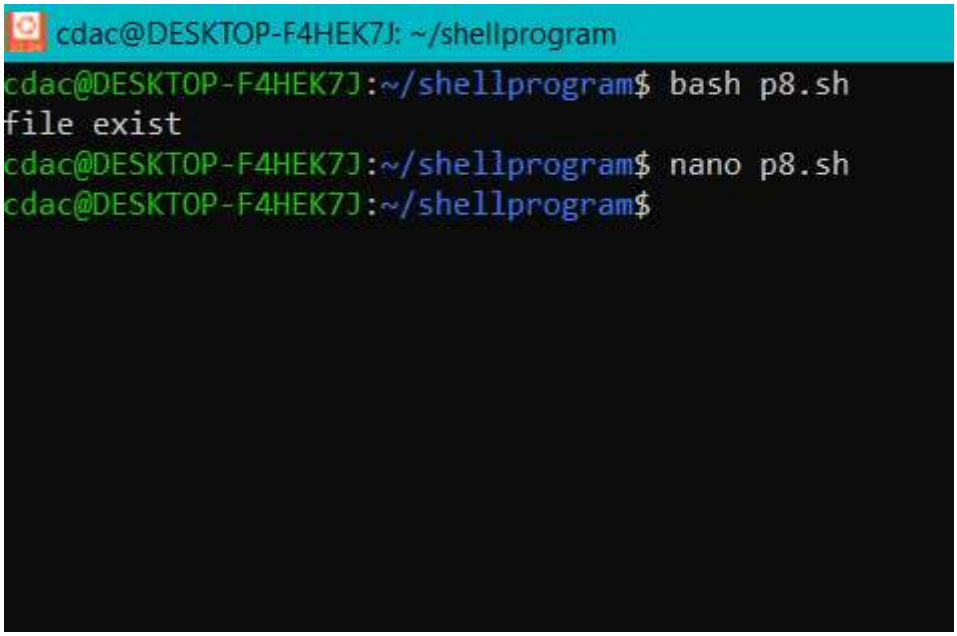


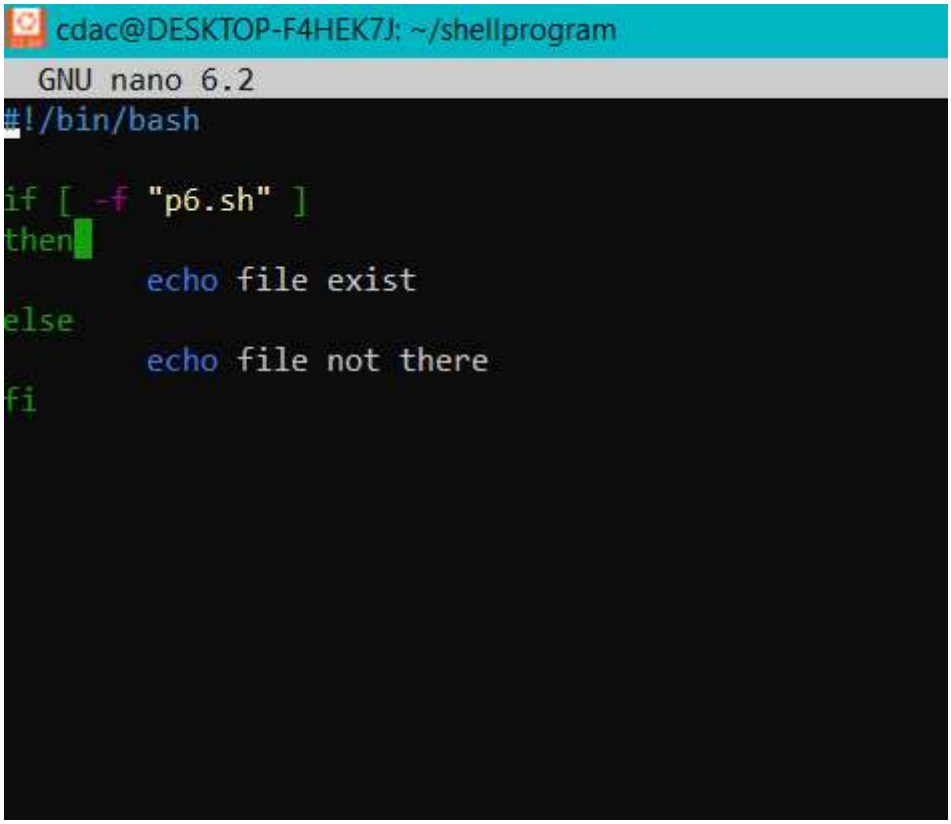
Question 7: Write a shell script that uses a while loop to print numbers from 1 to 5.

```
cdac@DESKTOP-F4HEK7J: ~/shellprogram
cdac@DESKTOP-F4HEK7J:~$ cd /home/cdac/shellprogram
cdac@DESKTOP-F4HEK7J:~/shellprogram$ ls
p1.sh  p2.sh  p3.sh  p4.sh  p5.sh
cdac@DESKTOP-F4HEK7J:~/shellprogram$ nano p6.sh
cdac@DESKTOP-F4HEK7J:~/shellprogram$ bash p6.sh
1
2
3
4
5
cdac@DESKTOP-F4HEK7J:~/shellprogram$ nano p6.sh
cdac@DESKTOP-F4HEK7J:~/shellprogram$
```

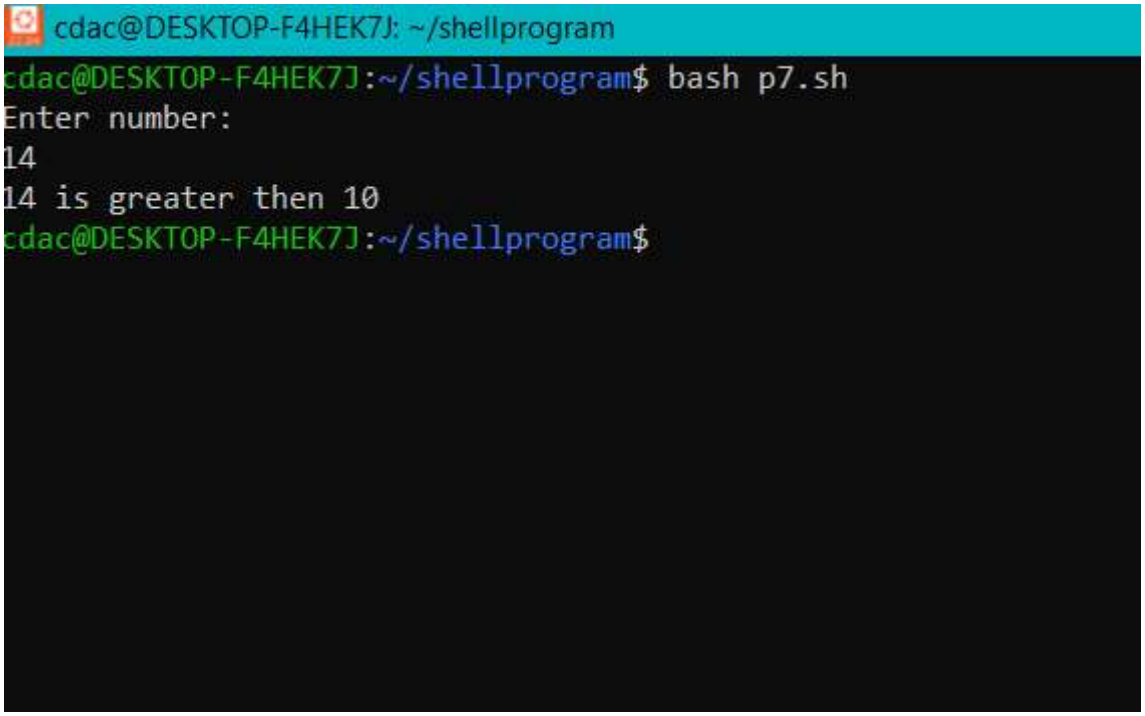
```
cdac@DESKTOP-F4HEK7J: ~/shellprogram
  GNU nano 6.2
#!/bin/bash

a=1

while [ $a -le 5 ]
do
        echo $a
        a=$((a+1))
done
```

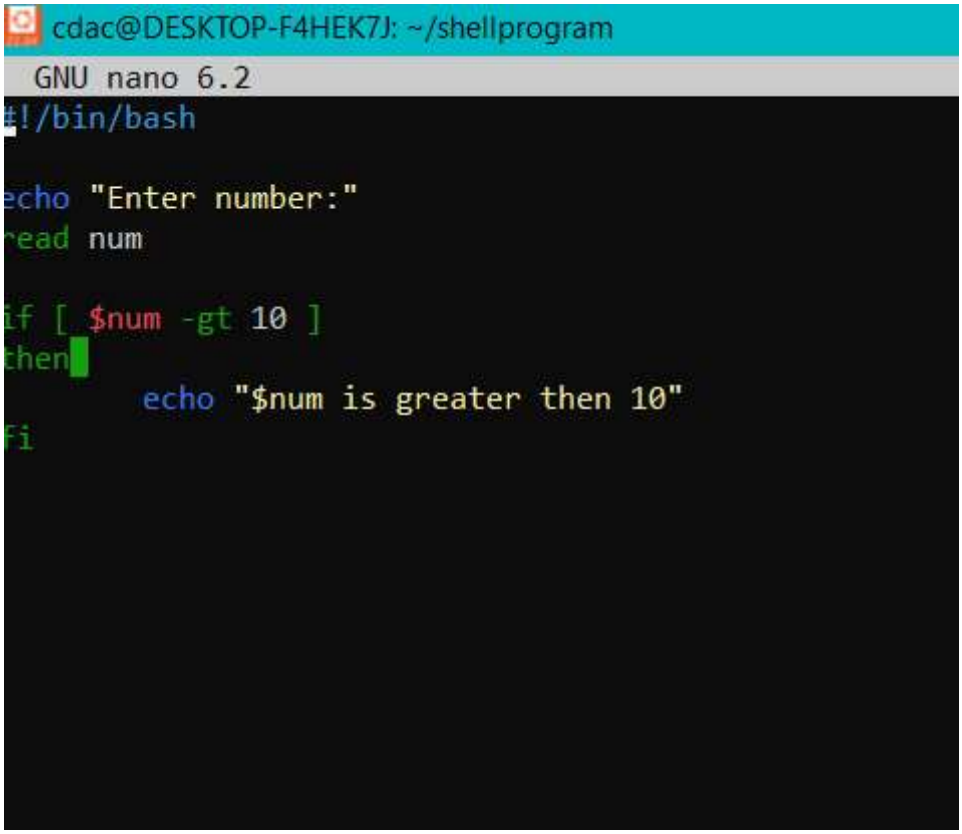
Question 8: Write a shell script that checks if a file named "file.txt" exists in the current directory. If it
does, print "File exists", otherwise, print "File does not exist".



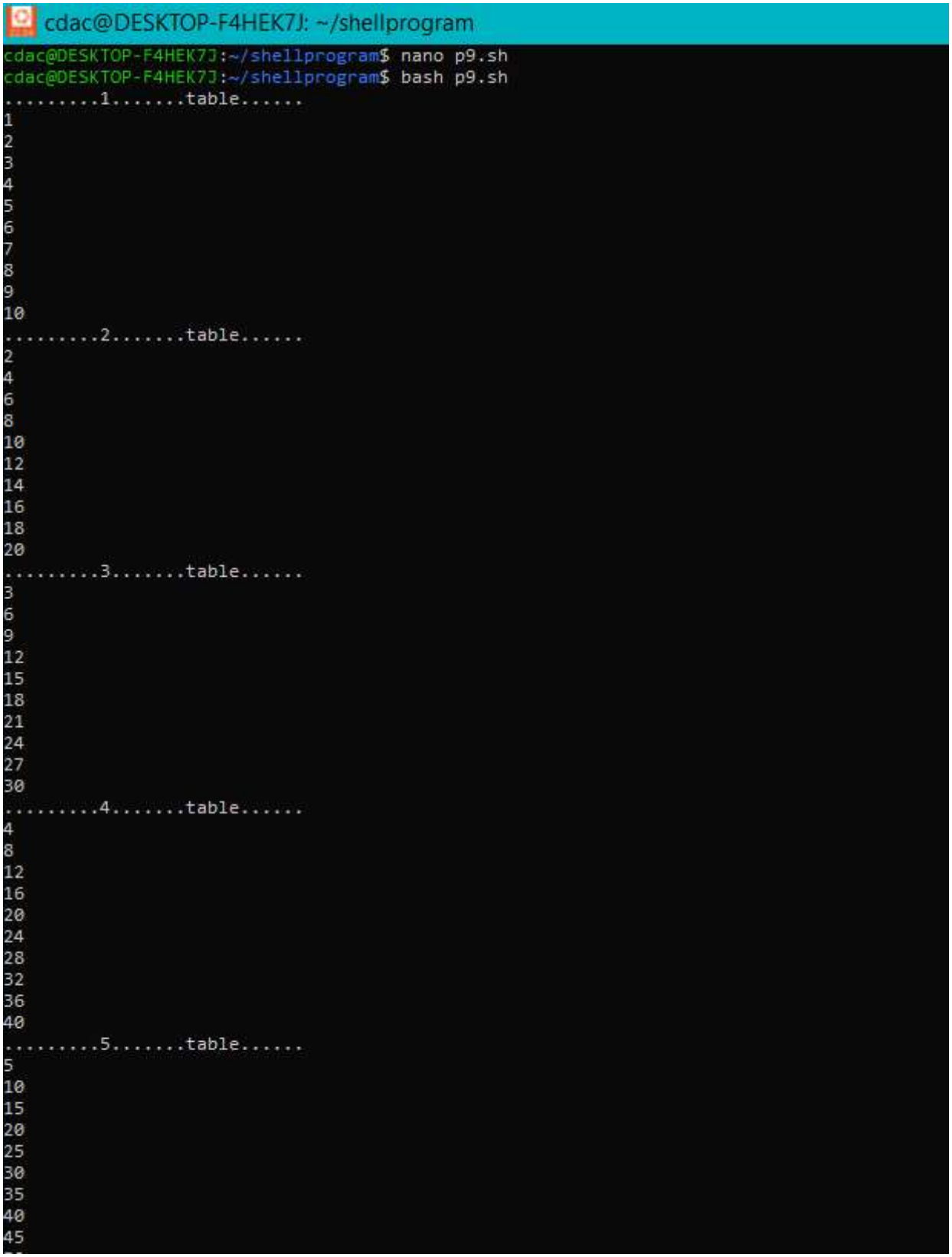


Question 9: Write a shell script that uses the if statement to check if a number is greater than 10 and
prints a message accordingly.





Question 10: Write a shell script that uses nested for loops to print a multiplication table for numbers
from 1 to 5. The output should be formatted nicely, with each row representing a number and each column representing the multiplication result for that number.


cdac@DESKTOP-F4HEK7J: ~/shellprogram
cdac@DESKTOP-F4HEK7J:~/shellprogram$ nano p9.sh
cdac@DESKTOP-F4HEK7J:~/shellprogram$ bash p9.sh
.........1.......table......
1
2
3
4
5
6
7
8
9
10
.........2.......table......
2
4
6
8
10
12
14
16
18
20
.........3.......table......
3
6
9
12
15
18
21
24
27
30
.........4.......table......
4
8
12
16
20
24
28
32
36
40
.........5.......table......
5
10
15
20
25
30
35
40
45

```
#!bin/bash

for n in {1..5..1}
do
        echo "........."$n".......table......"
        for m in {1..10..1}
        do
                echo $(($n * $m))
        done
done
```

Question 11: Write a shell script that uses a while loop to read numbers from the user until the user enters
a negative number. For each positive number entered, print its square. Use the break statement to exit the
loop when a negative number is entered.

```
cdac@DESKTOP-F4HEK7J: ~/shellprogram
cdac@DESKTOP-F4HEK7J:~$ cd /home/cdac/shellprogram
cdac@DESKTOP-F4HEK7J:~/shellprogram$ ls
p1.sh  p2.sh  p3.sh  p4.sh  p5.sh  p6.sh  p7.sh  p8.sh  p9.sh
cdac@DESKTOP-F4HEK7J:~/shellprogram$ nano p10.sh
cdac@DESKTOP-F4HEK7J:~/shellprogram$ bash p10.sh
Enter Number:
10
100
Enter Number:
2
4
Enter Number:
-1
1
cdac@DESKTOP-F4HEK7J:~/shellprogram$ nano p10.sh
cdac@DESKTOP-F4HEK7J:~/shellprogram$
```

```
#!/bin/bash

while [ 1 ]
do
        echo "Enter Number:"
        read num
        echo $(( $num * $num ))
        if [ $num -lt 0 ]
        then
        break
        fi
done
```