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

cdac@LAPTOP-NV03GB24:~$ nano p5.sh

cdac@LAPTOP-NV03GB24:~$ bash p5.sh

Hello world

```
cdac@LAPTOP-NV03GB24:~$ nano p5.sh
cdac@LAPTOP-NV03GB24:~$ bash p5.sh
Hello world
cdac@LAPTOP-NV03GB24:~$
```

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

name="CDAC MUMBAI"

echo $name

```
  GNU nano 6.2
name="CDAC MUMBAI"
echo $name
```

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

```
cdac@LAPTOP-NV03GB24:~$ nano p5.sh
cdac@LAPTOP-NV03GB24:~$ bash p5.sh
Enter the num
56
your number is: 56
cdac@LAPTOP-NV03GB24:~$
```

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

```
echo "enter num1"
read num1
echo "enter num2"
read num2
echo addition is:$(($num1 + $num2))
```

```
cdac@LAPTOP-NV03GB24:~$ nano p5.sh
cdac@LAPTOP-NV03GB24:~$ bash p5.sh
enter num1
5
enter num2
2
addition is:7
```

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

```
echo "Enter the Number"
read n
 r=`expr $n % 2`
 if [ $r -eq 0 ]
then
echo "$n is Even number"
else
echo "$n is Odd number"
 fi
```

```
cdac@LAPTOP-NV03GB24:~$ nano p3.sh
cdac@LAPTOP-NV03GB24:~$ bash p3.sh
Enter the Number
5
5 is Odd number
cdac@LAPTOP-NV03GB24:~$ bash p3.sh
Enter the Number
2
2 is Even number
```

Q6 : Write a shell script that uses a for loop to print numbers from 1 to 5.

cdac@LAPTOP-NV03GB24:~$ nano p3.sh

cdac@LAPTOP-NV03GB24:~$ cat p3.sh

```
i=0
for i in 1 2 3 4 5
do
        echo $i
done
```

cdac@LAPTOP-NV03GB24:~$ bash p3.sh

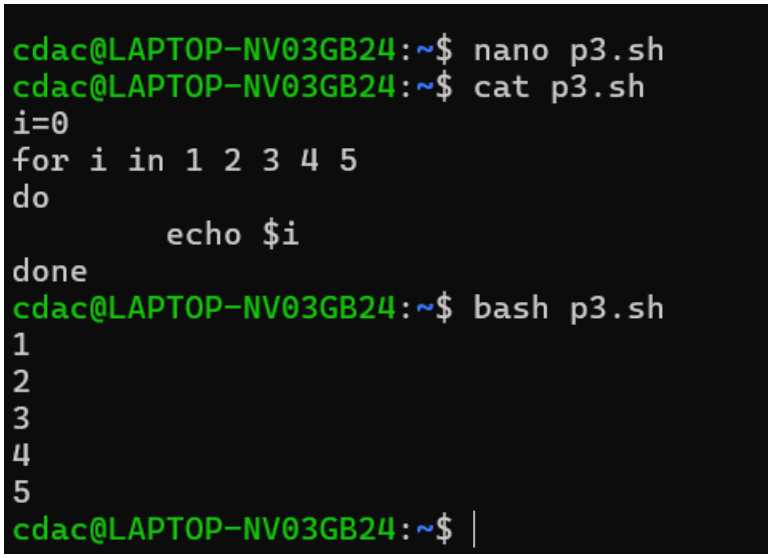
1

2

3

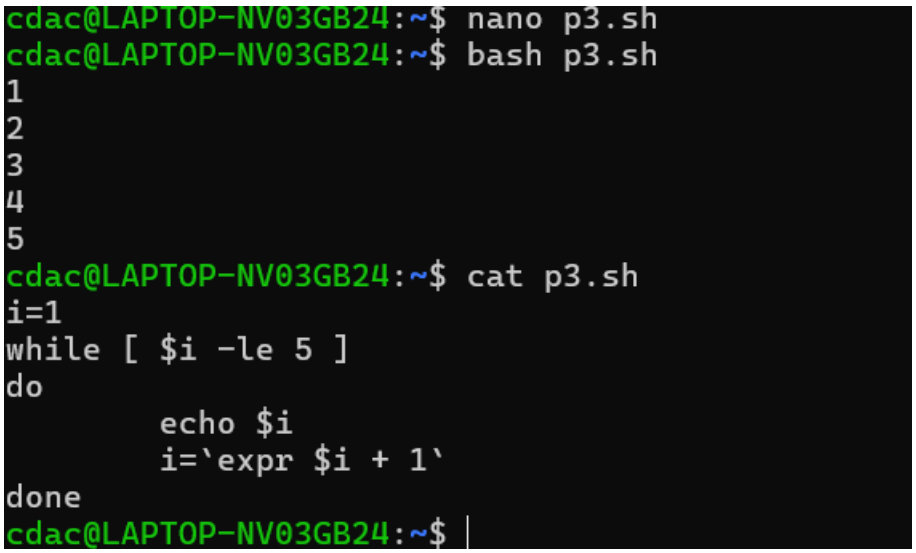
4

5



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

```
cdac@LAPTOP-NV03GB24:~$ nano p3.sh
cdac@LAPTOP-NV03GB24:~$ bash p3.sh
1
2
3
4
5
cdac@LAPTOP-NV03GB24:~$ cat p3.sh
i=1
while [ $i -le 5 ]
do
        echo $i
        i=`expr $i + 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".

If [-f “file1.txt”]

Then echo exist

Else echo not exist

```
cdac@LAPTOP-NV03GB24:~$ nano p5.sh
cdac@LAPTOP-NV03GB24:~$ ls
LinuxAssignment  docs        fruit.txt    p1     p5.sh
data.txt         file1,txt   numbers.txt  p2     pre1.text
day1             file1.txt   output.txt   p3.sh  subjects
cdac@LAPTOP-NV03GB24:~$ bash p5.sh
file exist
cdac@LAPTOP-NV03GB24:~$
```

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.

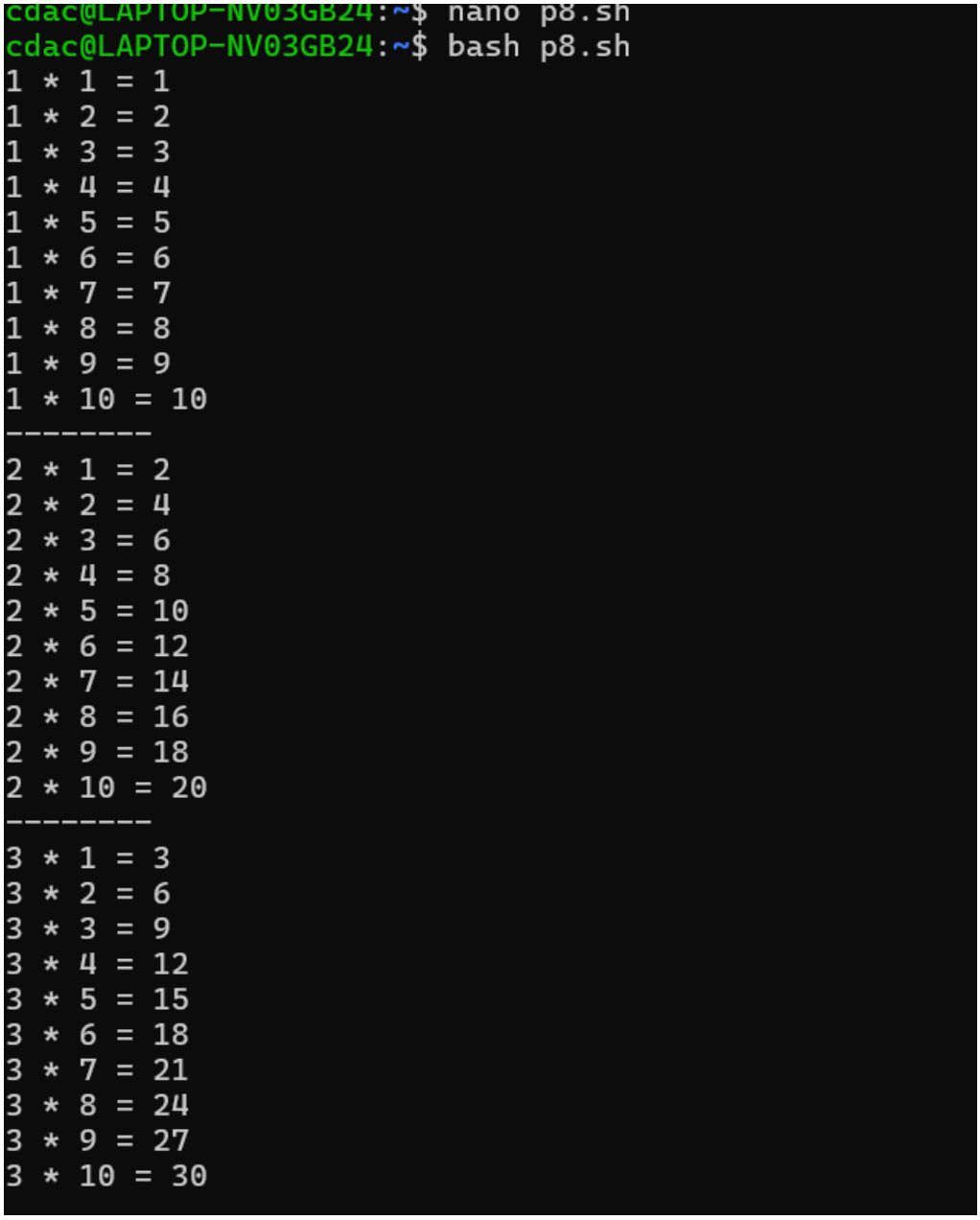
```
echo enter the num
read n
if [ $n -gt 10 ]
then
    echo greater than 10
else
    echo less than 10
fi
```

```
cdac@LAPTOP-NV03GB24:~$ cat p5.sh
echo enter the num
read n
if [ $n -gt 10 ]
then
        echo greater than 10
else
        echo less than 10
fi

cdac@LAPTOP-NV03GB24:~$ bash p5.sh
enter the num
5
less than 10
cdac@LAPTOP-NV03GB24:~$ bash p5.sh
enter the num
11
greater than 10
```

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.

```
for i in {1..5}
do
   for j in {1..10}
   do
      res=$((i * j))
      echo "$i * $j = $res"
   done
   echo "--------"
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@LAPTOP-NV03GB24:~$ nano p8.sh
cdac@LAPTOP-NV03GB24:~$ bash p8.sh
enter the num
5
25
enter the num
-1
no negative number
cdac@LAPTOP-NV03GB24:~$ cat p8.sh
while true
do
echo "enter the num"
read num
if [ $num -lt 0 ]
        then
                echo "no negative number"
                break
        fi

        squ=$((num*num))
        echo $squ
done
cdac@LAPTOP-NV03GB24:~$
```