

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

```
cdac@DESKTOP-0NKC98U: ~/LinuxAssignment/Assignment2$ cat file1.txt
echo "Hello, World!"
cdac@DESKTOP-0NKC98U:~/LinuxAssignment/Assignment2$ bash file1.txt
Hello, World!
cdac@DESKTOP-0NKC98U:~/LinuxAssignment/Assignment2$ |
```

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

```
cdac@DESKTOP-0NKC98U: ~/LinuxAssignment/Assignment2$ cat file2.txt
name="CDAC Mumbai"
echo $name
cdac@DESKTOP-0NKC98U:~/LinuxAssignment/Assignment2$ bash file2.txt
CDAC Mumbai
cdac@DESKTOP-0NKC98U:~/LinuxAssignment/Assignment2$ |
```

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

```
cdac@DESKTOP-0NKC98U: ~/LinuxAssignment/Assignment2$ cat file3.txt
echo "Enter a number"
read no

echo "The number entered by you is $no"
cdac@DESKTOP-0NKC98U:~/LinuxAssignment/Assignment2$ bash file3.txt
Enter a number
50
The number entered by you is 50
cdac@DESKTOP-0NKC98U:~/LinuxAssignment/Assignment2$ |
```

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

```
cdac@DESKTOP-0NKC98U: ~/LinuxAssignment/Assignment2$ cat file4.txt
echo "Enter 1st number: "
read no1
echo "Enter 2nd number: "
read no2

sum=$((no1+no2))
echo "Sum is $sum"
cdac@DESKTOP-0NKC98U:~/LinuxAssignment/Assignment2$ bash file4.txt
Enter 1st number:
10
Enter 2nd number:
20
Sum is 30
cdac@DESKTOP-0NKC98U:~/LinuxAssignment/Assignment2$ |
```

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

```
cdac@DESKTOP-0NKC98U: ~/LinuxAssignment/Assignment2$ cat file5.txt
echo "Enter a number"
read no

if [ $((no%2)) -eq 0 ]
then
echo "Even"
else
echo "Odd"
fi
cdac@DESKTOP-0NKC98U:~/LinuxAssignment/Assignment2$ bash file5.txt
Enter a number
5
Odd
cdac@DESKTOP-0NKC98U:~/LinuxAssignment/Assignment2$ |
```

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

```
cdac@DESKTOP-0NKC98U: ~/LinuxAssignment/Assignment2$ cat file6.txt
a=1
while [ $a -lt 6 ]
do
echo $a
a=$((a+1))
done
cdac@DESKTOP-0NKC98U:~/LinuxAssignment/Assignment2$ bash file6.txt
1
2
3
4
5
cdac@DESKTOP-0NKC98U:~/LinuxAssignment/Assignment2$ |
```

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

```
cdac@DESKTOP-0NKC98U: ~/LinuxAssignment/Assignment2$ cat file7.txt
end=5
for ((a=1; a<=end; a++))
do
echo $a
done
cdac@DESKTOP-0NKC98U:~/LinuxAssignment/Assignment2$ bash file7.txt
1
2
3
4
5
cdac@DESKTOP-0NKC98U:~/LinuxAssignment/Assignment2$ |
```

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".

```
cdac@DESKTOP-0NKC98U: ~/LinuxAssignment/Assignment2$ cat file8.txt
if [[ -f "file.txt" ]]
then
echo "file exists"
else
echo "Not exists"
fi
cdac@DESKTOP-0NKC98U:~/LinuxAssignment/Assignment2$ bash file8.txt
file exists
cdac@DESKTOP-0NKC98U:~/LinuxAssignment/Assignment2$ rm file.txt
cdac@DESKTOP-0NKC98U:~/LinuxAssignment/Assignment2$ bash file8.txt
Not exists
cdac@DESKTOP-0NKC98U:~/LinuxAssignment/Assignment2$ |
```

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.

```
cdac@DESKTOP-0NKC98U: ~/ × + v
cdac@DESKTOP-0NKC98U:~/LinuxAssignment/Assignment2$ cat file9.txt
echo "Enter a number"
read no

if [ $no -lt 10 ]
then
echo "$no is smaller"
else
echo "$no is greater"
fi
cdac@DESKTOP-0NKC98U:~/LinuxAssignment/Assignment2$ bash file9.txt
Enter a number
5
5 is smaller
cdac@DESKTOP-0NKC98U:~/LinuxAssignment/Assignment2$ |
```

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-0NKC98U: ~/ × + v
cdac@DESKTOP-0NKC98U:~/LinuxAssignment/Assignment2$ cat file10.txt

for i in {1..5}
do
for j in {1..10}
do
p=$((i*j))
printf "%d " $p
done
echo
done
cdac@DESKTOP-0NKC98U:~/LinuxAssignment/Assignment2$ bash file10.txt
1 2 3 4 5 6 7 8 9 10
2 4 6 8 10 12 14 16 18 20
3 6 9 12 15 18 21 24 27 30
4 8 12 16 20 24 28 32 36 40
5 10 15 20 25 30 35 40 45 50
cdac@DESKTOP-0NKC98U:~/LinuxAssignment/Assignment2$ |
```

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-0NKC98U: ~/ × + v
cdac@DESKTOP-0NKC98U:~/LinuxAssignment/Assignment2$ cat file11.txt

while true
do

echo "Enter a number: "
read no

if ((no<0))
then
echo "Can not be done, Please enter positive number..."
break
fi

s=$((no*no))
echo $s
done
cdac@DESKTOP-0NKC98U:~/LinuxAssignment/Assignment2$ bash file11.txt
Enter a number:
5
25
Enter a number:
-4
Can not be done, Please enter positive number...
cdac@DESKTOP-0NKC98U:~/LinuxAssignment/Assignment2$ |
```