

## Part C

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

```
#!/bin/bash
echo Hello, World!
```

```
root@Rishabh:~/ShellProgramming# nano a1
root@Rishabh:~/ShellProgramming# bash a1
Hello, World!
root@Rishabh:~/ShellProgramming# _
```

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

```
#!/bin/bash
name="CDAC Mumbai"
echo $name
```

```
root@Rishabh:~/ShellProgramming# nano a1
root@Rishabh:~/ShellProgramming# bash a1
CDAC Mumbai
root@Rishabh:~/ShellProgramming# _
```

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

```
#!/bin/bash
echo "Enter a number"
read number
echo "$number"
```

```
root@Rishabh:~/ShellProgramming# nano 3
root@Rishabh:~/ShellProgramming# bash 3
Enter a number
4
4
root@Rishabh:~/ShellProgramming# _
```

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

```
#!/bin/bash
echo "Enter a number to check even/odd"
read n
if (( $n % 2 == 0 ))
then
    echo "Even"
else
    echo "Odd"
fi
```

```

root@Rishabh:~/ShellProgramming# nano d
root@Rishabh:~/ShellProgramming# bash d
Enter first number
4
Enter second number
6
Addition is: 10
root@Rishabh:~/ShellProgramming# _

```

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

```

#!/bin/bash
echo "Enter a number to check even/odd"
read n
if (( $n % 2 == 0 ))
then
    echo "Even"
else
    echo "Odd"
fi

```

```

root@Rishabh:~/ShellProgramming# bash e
Enter a number to check even/odd
4
Even
root@Rishabh:~/ShellProgramming# bash e
Enter a number to check even/odd
5
Odd
root@Rishabh:~/ShellProgramming# _

```

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

```

#!/bin/bash
a=0
for a in 1 2 3 4 5
do
    echo $a
done

```

```

root@Rishabh:~/ShellProgramming# nano f
root@Rishabh:~/ShellProgramming# bash f
1
2
3
4
5
root@Rishabh:~/ShellProgramming# _

```

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

```
#!/bin/bash
i=1
while [ $i -le 5 ]
do
    echo $i
    i=$((i+1))
done
```

```
root@Rishabh:~/ShellProgramming# nano g
root@Rishabh:~/ShellProgramming# bash g
1
2
3
4
5
root@Rishabh:~/ShellProgramming#
```

**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".

```
#!/bin/bash
if [ -f file5.txt ]
then
    echo "File exists"
else
    echo "File does not exist"
fi
```

```
root@Rishabh:~/ShellProgramming# bash h
File does not exist
root@Rishabh:~/ShellProgramming#
```

**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.

```
#!/bin/bash
echo "Enter a number"
read n
if [ $n -gt 10 ]
then
    echo "Number is greater than 10"
else
    echo "Number is not greater than 10"
fi
```

```
root@Rishabh:~/ShellProgramming# nano i
root@Rishabh:~/ShellProgramming# bash i
Enter a number
5
Number is not greater than 10
root@Rishabh:~/ShellProgramming# bash i
Enter a number
10
Number is not greater than 10
root@Rishabh:~/ShellProgramming# bash i
Enter a number
11
Number is greater than 10
root@Rishabh:~/ShellProgramming#
```