Assignment 2

Part B

Identify True or False:

Sr. No.	Questions	True/False
1	ls is used to list files and directories in a directory.	**True** The ls command is used to list files and directories
2	mv is used to move files and directories.	**True** The mv command is used to move files and directories from one location to another
3	cd is used to copy files and directories.	**False** it is used to change directories
4	pwd stands for "print working directory" and displays the current directory	**True**
5	grep is used to search for patterns in files.	**True**
6	chmod 755 file.txt gives read, write, and execute permissions to the owner, and read and execute permissions to group and others.	**True**
7	mkdir -p directory1/directory2 creates nested directories, creating directory2 inside directory1 if directory1 does not exist.	**True**
8	rm -rf file.txt deletes a file forcefully without confirmation.	**True**

Identify the Incorrect Commands:

1. **chmodx** is used to change file permissions. →**Incorrect - (chmod)**

   e.g.: chmod 755 file.txt

2. **cpy** is used to copy files and directories. → **Incorrect - (cp)**

   e.g.: cp file1.txt file2.txt

3. **mkfile** is used to create a new file. →**Incorrect – (touch)**

   e.g.: touch file1.txt

4. **catx** is used to concatenate files. →**Incorrect - (cat)**

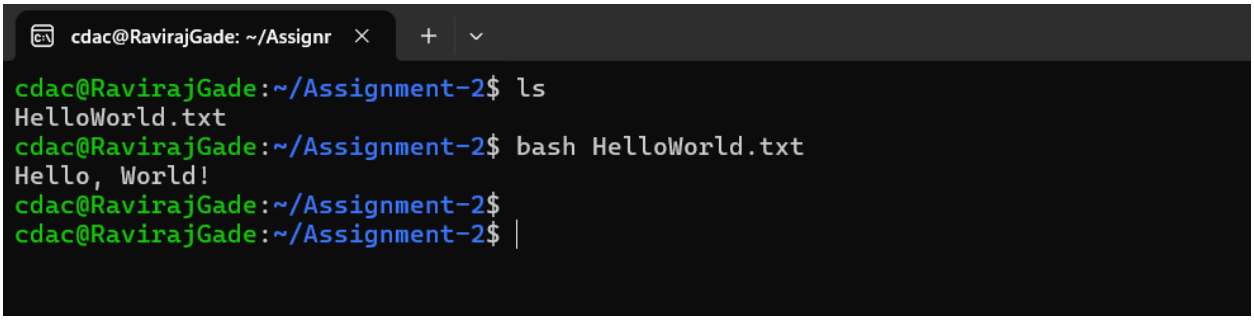
   e.g.: cat file1.txt > **file2.txt**

5. **rn** is used to rename files. →**Incorrect – (mv)**

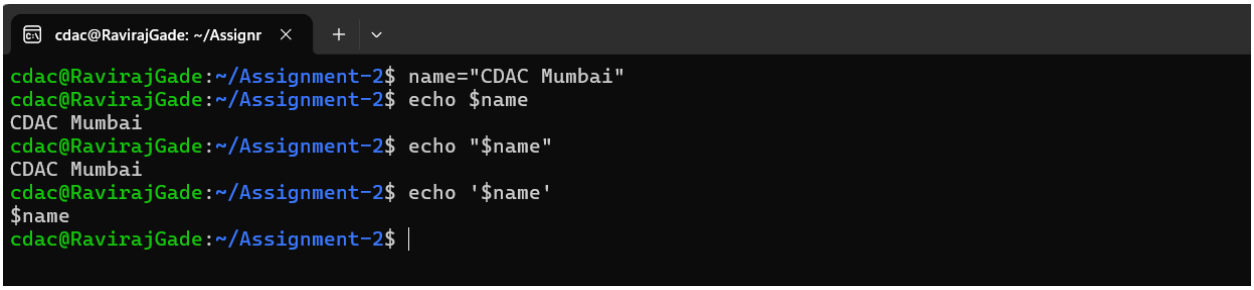
   e.g.: mv file1.txt file.txt

Part C

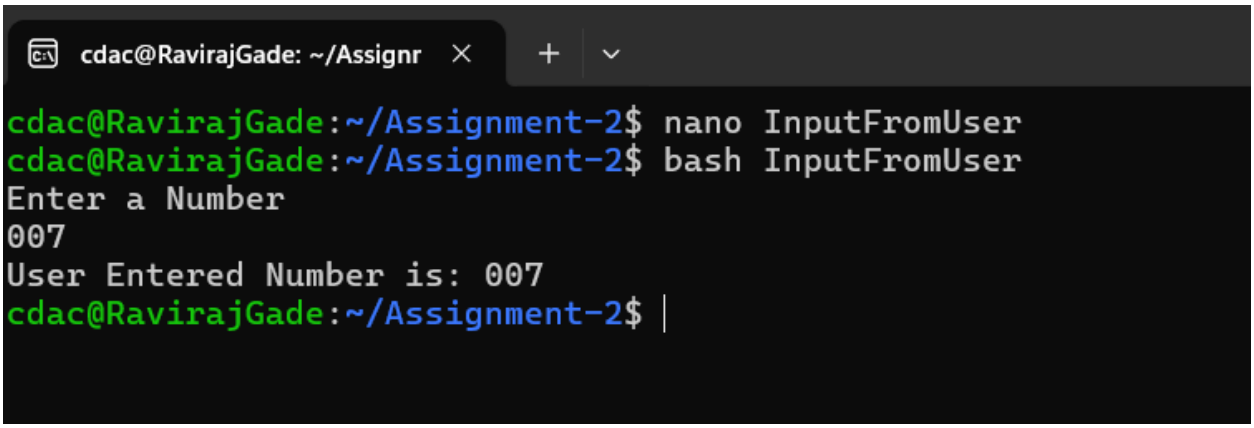
Question 1: Write a shell script that prints "Hello, World!" to the terminal.



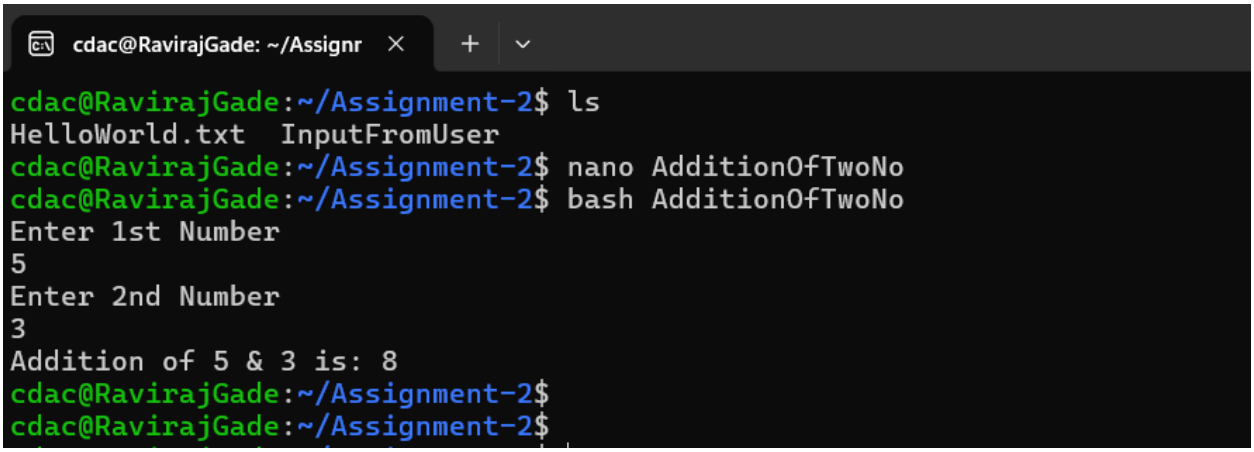
Question 2: Declare a variable named "name" and assign the value "CDAC Mumbai" to it. Print the value of the variable.



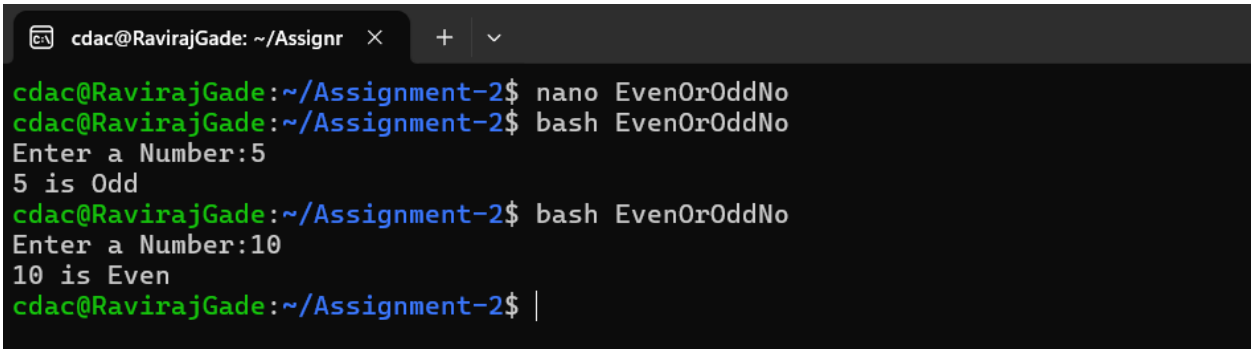
Question 3: Write a shell script that takes a number as input from the user and prints it.



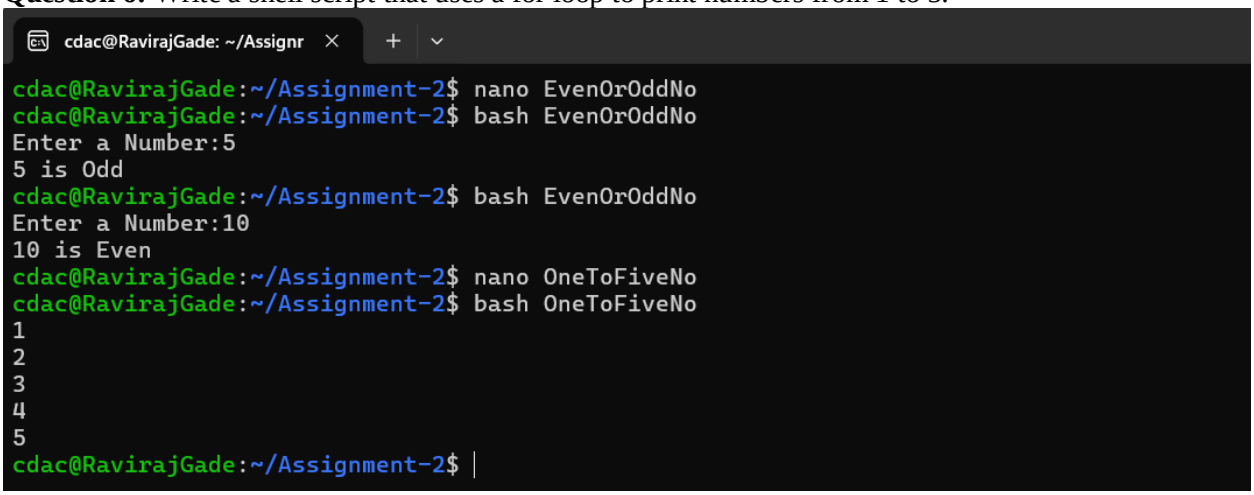
Question 4: Write a shell script that performs addition of two numbers (e.g., 5 and 3) and prints the result.



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@RavirajGade: ~/Assignr
cdac@RavirajGade:~/Assignment-2$ nano OneToFive
cdac@RavirajGade:~/Assignment-2$ bash OneToFive
1
2
3
4
5
cdac@RavirajGade:~/Assignment-2$
```

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".

```
cdac@RavirajGade: ~/Assignr
cdac@RavirajGade:~/Assignment-2$ ls
AdditionOfTwoNo  EvenOrOddNo  HelloWorld.txt  InputFromUser  OneToFive  OneToFiveNo  file.txt
cdac@RavirajGade:~/Assignment-2$ nano CheckFileName
cdac@RavirajGade:~/Assignment-2$ bash CheckFileName
File Exists
cdac@RavirajGade:~/Assignment-2$
```

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@RavirajGade: ~/Assignr
cdac@RavirajGade:~/Assignment-2$ bash GreaterNo.txt
Enter a Number:10
10 is not Greater than 10
cdac@RavirajGade:~/Assignment-2$ bash GreaterNo.txt
Enter a Number:12
12 is Greater than 10
cdac@RavirajGade:~/Assignment-2$ bash GreaterNo.txt
Enter a Number:8
8 is not Greater than 10
cdac@RavirajGade:~/Assignment-2$
```

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@RavirajGade: ~/Assignr
cdac@RavirajGade:~/Assignment-2$ nano OneToFiveMul.txt
cdac@RavirajGade:~/Assignment-2$ bash OneToFiveMul.txt
Multiplication Table from 1 to 5
 1 |   1   2   3   4   5   6   7   8   9  10
 2 |   2   4   6   8  10  12  14  16  18  20
 3 |   3   6   9  12  15  18  21  24  27  30
 4 |   4   8  12  16  20  24  28  32  36  40
 5 |   5  10  15  20  25  30  35  40  45  50
cdac@RavirajGade:~/Assignment-2$
```

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.