What will the following commands do?

• **echo "Hello, World!" :-**echo command is used to print the string .

• **name="Productive":**In shell script variable name store the “productive”;

• **touch file.txt**:Create new file in directory,create file name with file.txt

• **ls -a:**ls command use to show the list of directory and ls -a command show all directory list and also files.

• **rm file.txt :**Remove the file or delete the file from directory.

• **cp file1.txt file2.txt :**Copy the content of file named file1.txt into file2.txt.

• **mv file.txt /path/to/directory/** :

• **chmod 755 script.sh :**This command is used to change the modification means Give permission to files,Read ,Write,Execute the file script.sh.

• **grep "pattern" file.txt:**This command is use to search a particular pattern available in file.txt.

• **kill PID**

• **mkdir mydir && cd mydir && touch file.txt && echo "Hello, World!" > file.txt && cat file.txt :**In this Command Multiple operations done,Output of one command is used as input of another or next command.

1.In This command line First create new directory name mydir.

2.change the directory ,in that create new file name file.txt in that file write “hello world!,redirect with file.txt and display on terminal.

• **ls -l | grep ".txt" :**In this command list the files available in directory and search a for .txt file.display only .txt files.

• **cat file1.txt file2.txt | sort | uniq :**In this command line display the sort content of file1 and file2 uniq.

• **ls -l | grep "^d":**This command display the list of directories only.Because grep “^d” search for directory .

- **grep -r "pattern" /path/to/directory/**

- **cat file1.txt file2.txt | sort | uniq –d:** cat command is used to display the content of file1.txt and file2.text ,sort the content alphabeticaly and display the duplicate contents.

- **chmod 644 file.txt :**This command is used to give the read and write permission to owner of file.text and read permission for group and others.

- **chmod u+x file.txt :**this command is used to give execute permission for user of file.text.

- **echo $PATH**

Part B

Identify True or False:

1. ls is used to list files and directories in a directory.:**True** ls command is used to print the all list of directoris and files.

2. mv is used to move files and directories. :**True**:mv is used to move the files

3. cd is used to copy files and directories. :**False:**cd command is used to change the directory.

4. pwd stands for "print working directory" and displays the current directory.:**True**

5. grep is used to search for patterns in files. :**True:**grep command use to search particular pattern available in file.

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.:**False**

Identify the Incorrect Commands:

1. chmodx is used to change file permissions.:chmod used to change the file permissions.

2. cpy is used to copy files and directories.:cp used to copy file and directories.

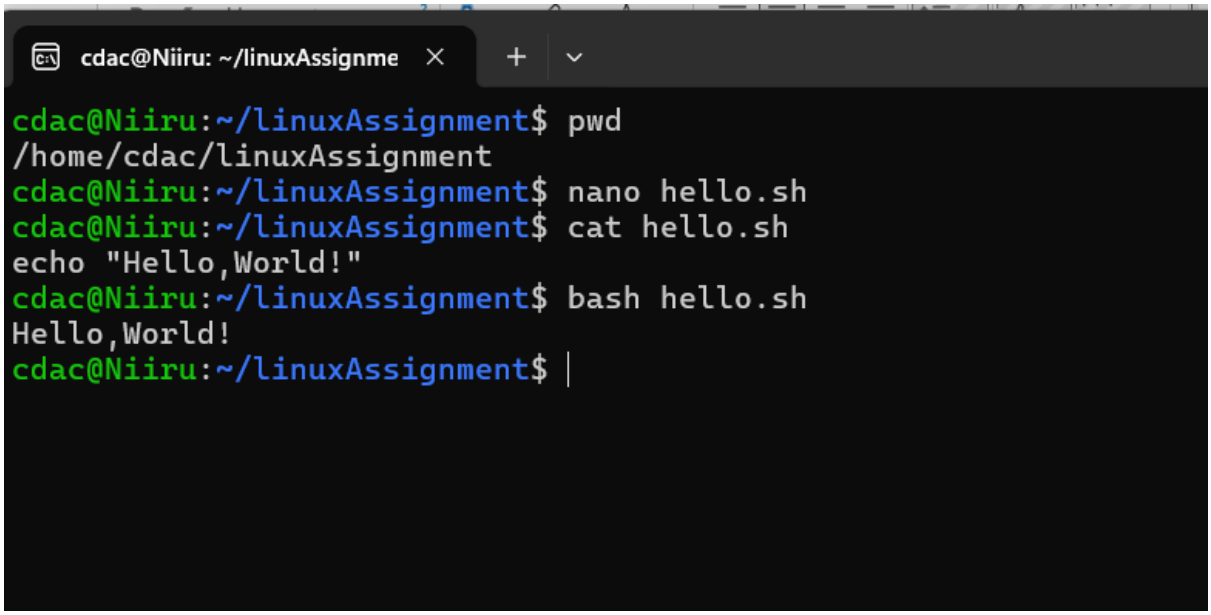
3. mkfile is used to create a new file. :To create new file used **touch** command.

4. catx is used to concatenate files.:cat command is used to display the content.

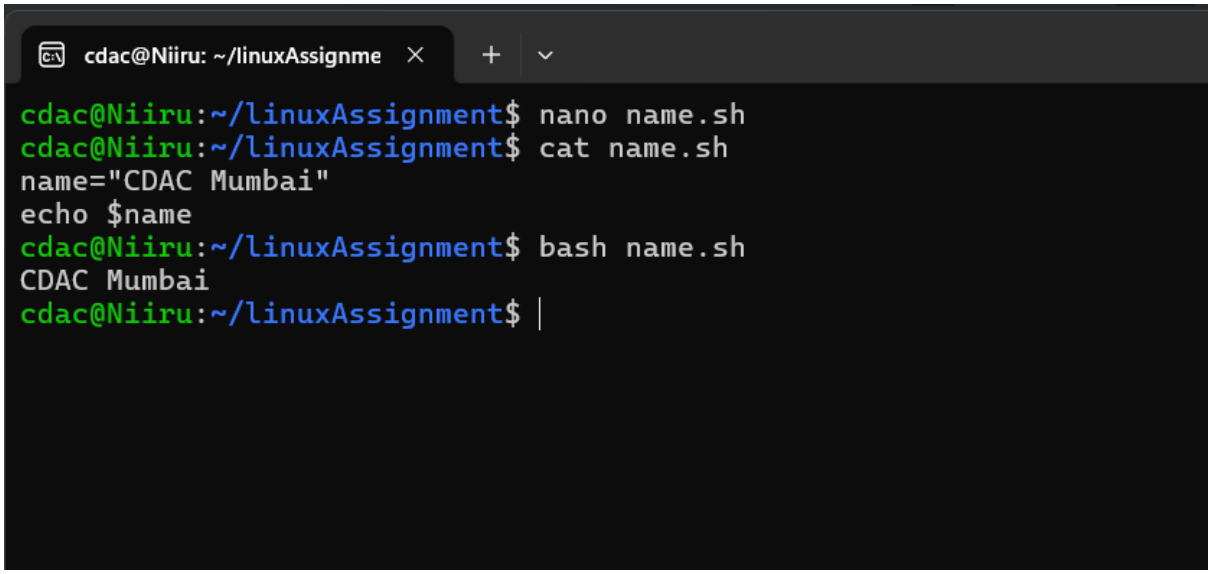
5. rn is used to rename files.:mv is used to rename files.

Part C

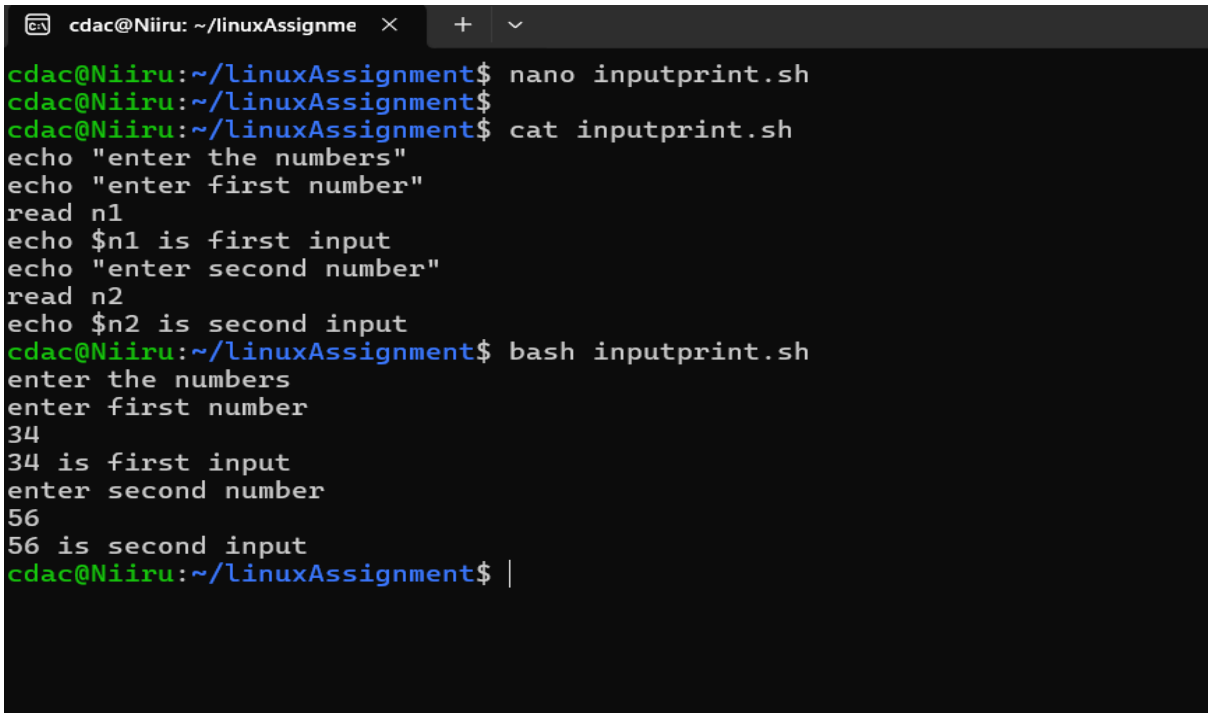
Question 1: Write a shell script that prints "Hello, World!" to the terminal.



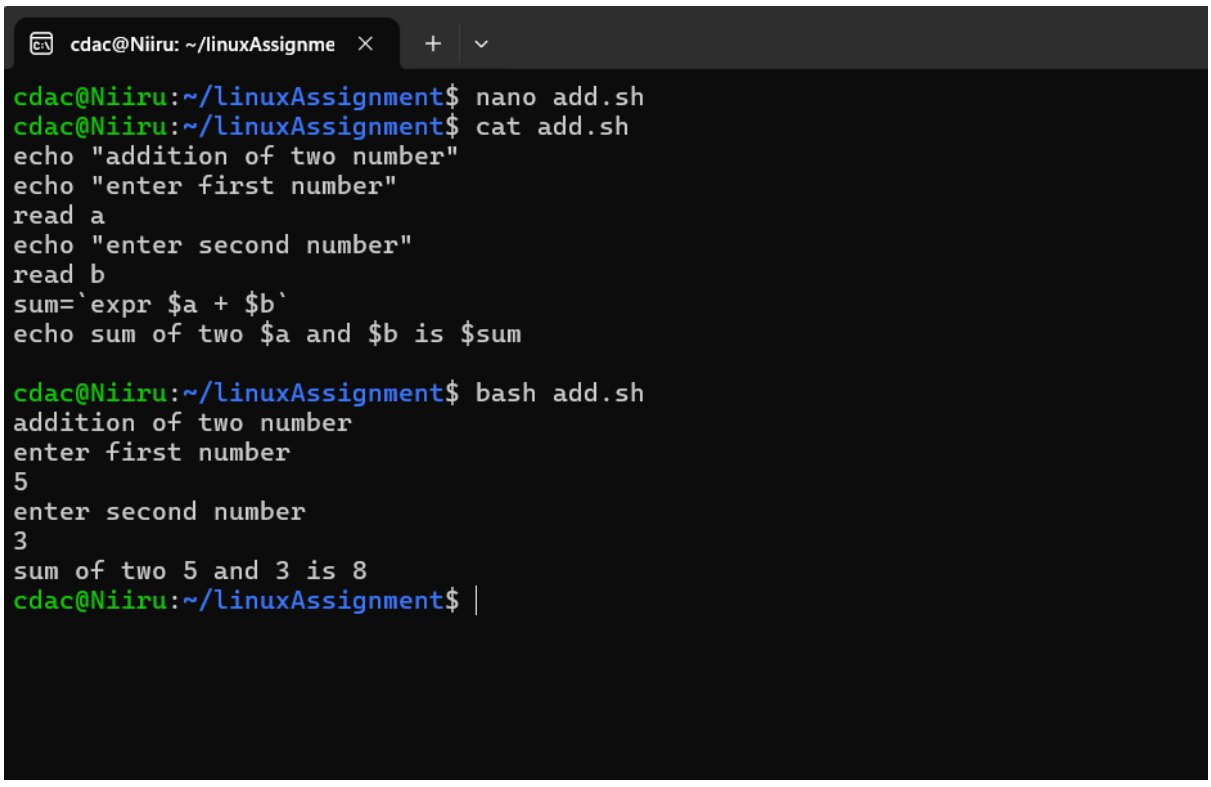
Question 2: Declare a variable named "name" and assign the value "CDAC Mumbai" to it. Print the value of the variable.



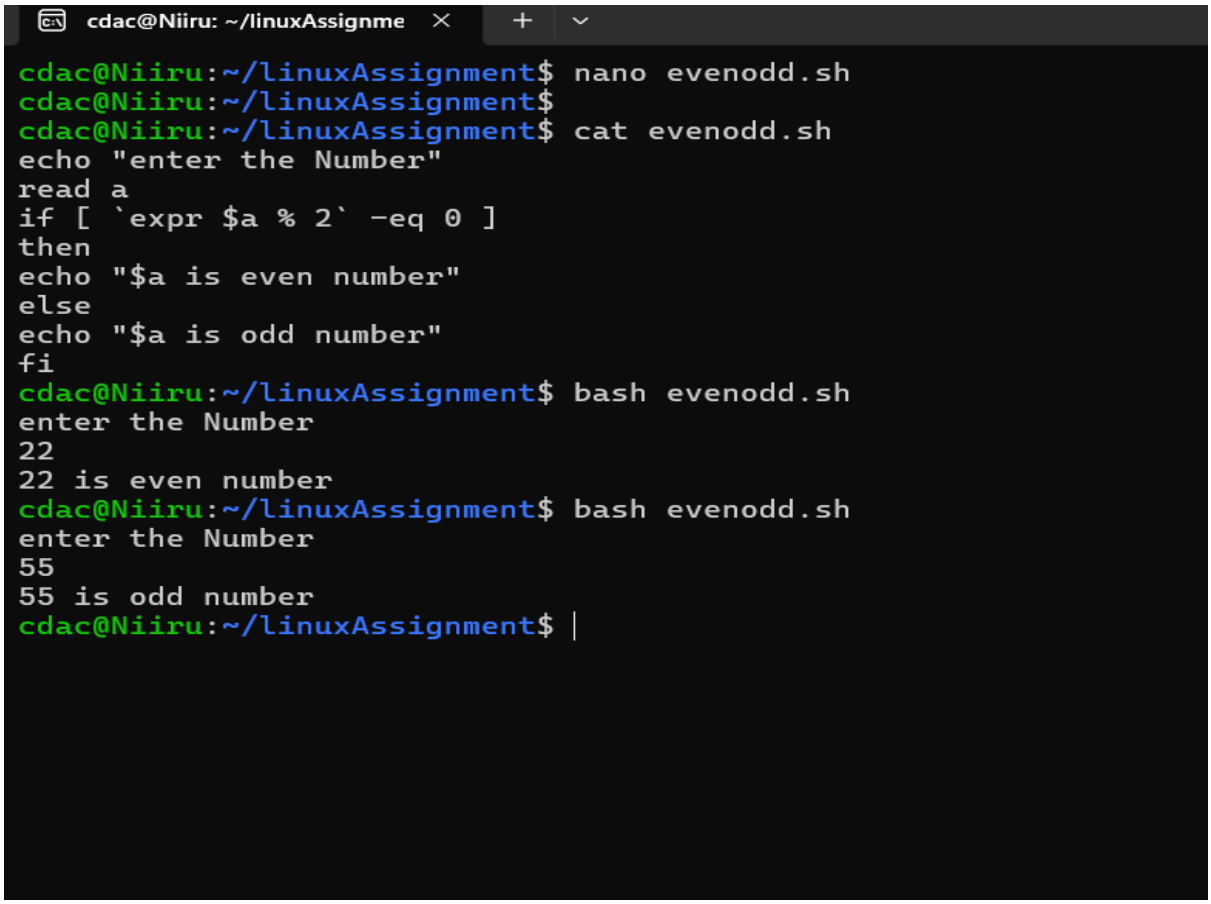
Question 3: Write a shell script that takes a number as input from the user and prints it.



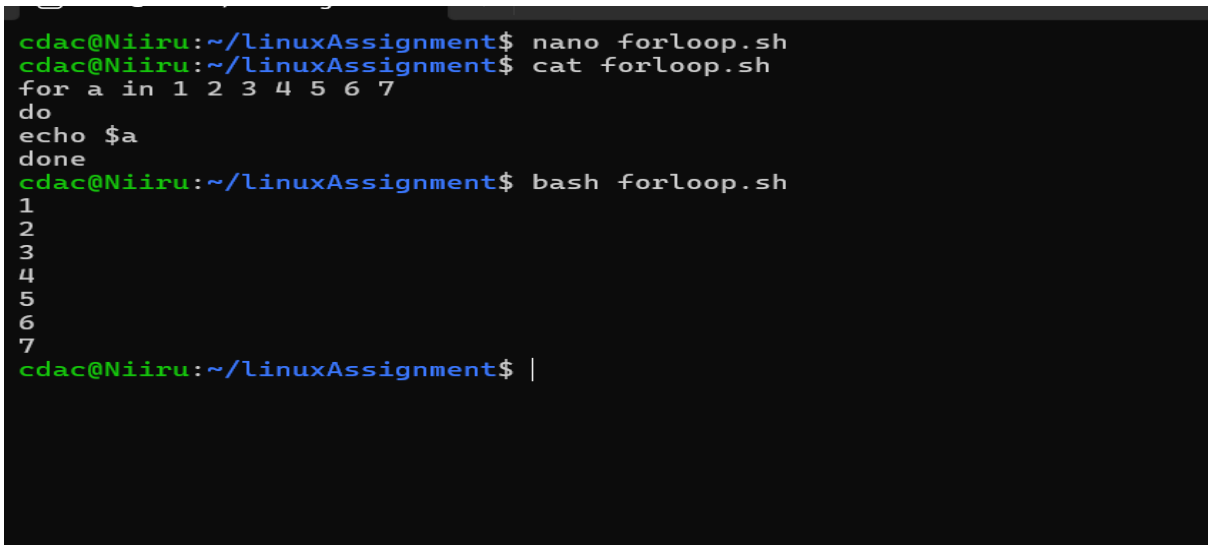
Question 4: Write a shell script that performs addition of two numbers (e.g., 5 and 3) and prints the result.



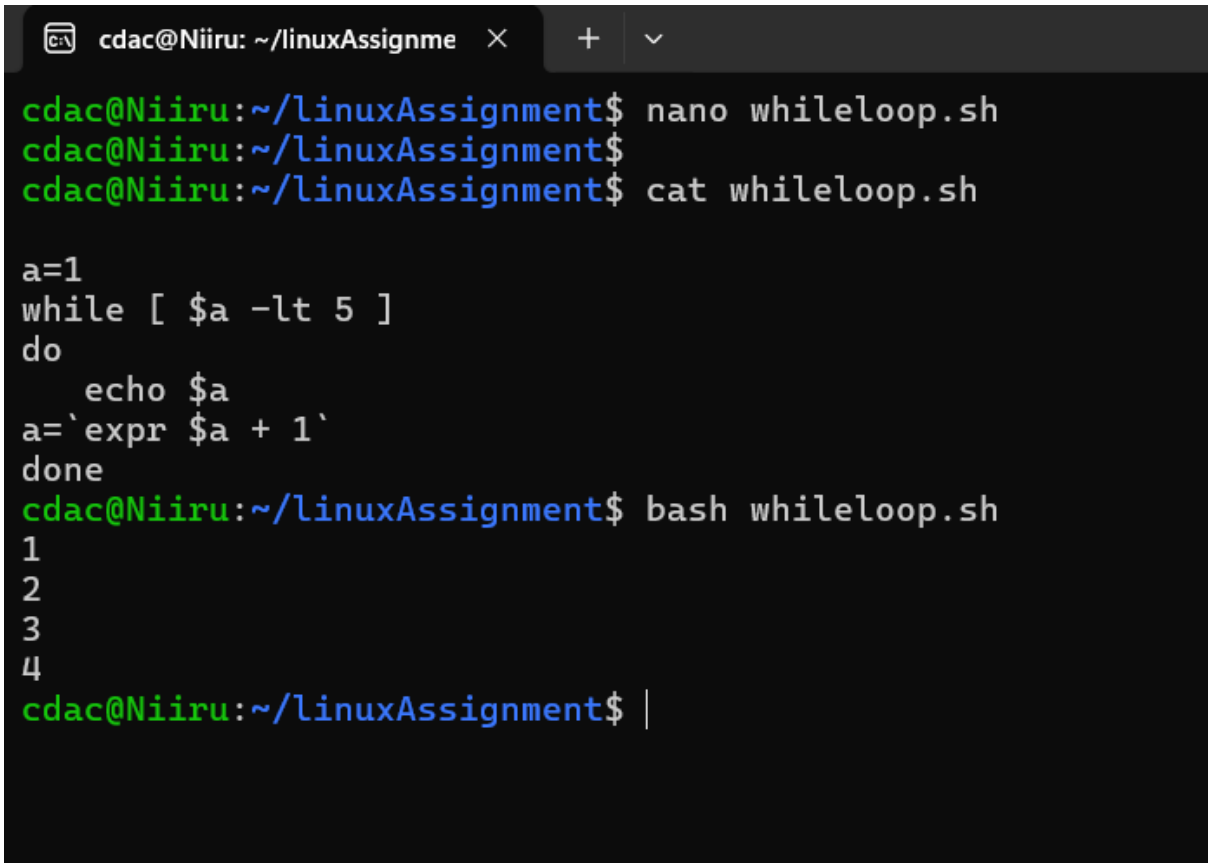
Question 5: Write a shell script that takes a number as input and prints "Even" if it is even, otherwise prints "Odd".



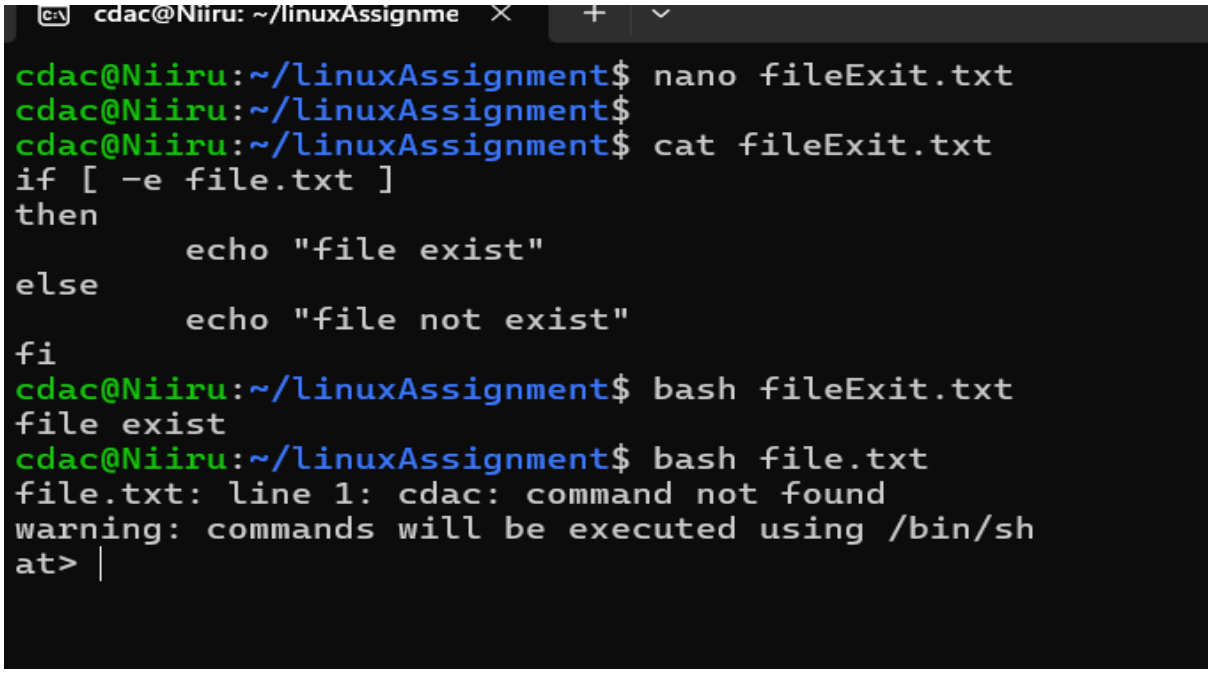
Question 6: Write a shell script that uses a for loop to print numbers from 1 to 5.



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



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.