**Assignment 1: Count the number of files and folder present in the directory. if possible take the directory path from user.**

**Ans:**

#!/bin/bash

# Prompt user for directory path

echo "Enter the directory path:"

read directory

# Check if the directory exists

if [ ! -d "$directory" ]; then

echo "Error: Directory does not exist."

exit 1

fi

# Count files and folders

file\_count=$(find "$directory" -type f | wc -l)

folder\_count=$(find "$directory" -type d | wc -l)

# Print the counts

echo "Number of files in '$directory': $file\_count"

echo "Number of folders in '$directory': $folder\_count"

**Assignment 2: Ensure the script checks if a specific file (e.g., myfile.txt) exists in the current directory. If it exists, print "File exists", otherwise print "File not found".**

**Ans:-**

#!/bin/bash

# Check if myfile.txt exists in the current directory

if [ -f "myfile.txt" ]; then

echo "File exists"

else

echo "File not found"

fi

**Assignment 3: Write a script that reads numbers from the user until they enter '0'. The script should also print whether each number is odd or even.**

**Ans:-**

#!/bin/bash

echo "Enter numbers (enter '0' to exit):"

while :

do

read -p "Number: " number

# Check if the input is '0' to exit the loop

if [ "$number" -eq 0 ]; then

echo "Exiting..."

break

fi

# Check if the number is odd or even

if [ $((number % 2)) -eq 0 ]; then

echo "$number is even."

else

echo "$number is odd."

fi

done

**Assignment 4: Create a function that takes a filename as an argument and prints the number of lines in the file. Call this function from your script with different filenames.**

**Ans:-**

#!/bin/bash

# Function to count lines in a file

count\_lines() {

local filename="$1"

if [ -f "$filename" ]; then

lines=$(wc -l < "$filename")

echo "Number of lines in '$filename': $lines"

else

echo "Error: '$filename' is not a valid file."

fi

}

# Calling the function with different filenames

echo "Counting lines in files:"

count\_lines "file1.txt"

count\_lines "file2.txt"

count\_lines "nonexistent\_file.txt"