**Assignment 1**

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

echo "myfile.txt exists."

else

echo "myfile.txt not found."

fi

**Assignment 2**

#!/bin/bash

check\_odd\_even() {

if [ $1 -eq 0 ]; then

echo "Neither odd nor even"

elif [ $(( $1 % 2 )) -eq 0 ]; then

echo "Even"

else

echo "Odd"

fi

}

while true; do

read -p "Enter a number (enter '0' to exit): " number

if [[ $number =~ ^-?[0-9]+$ ]]; then

result=$(check\_odd\_even $number)

echo "$number is $result"

if [ $number -eq 0 ]; then

break

fi

else

echo "Please enter a valid number."

fi

done

**Assignment 3**

#!/bin/bash

count\_lines\_in\_file() {

file\_name=$1

if [ -e "$file\_name" ]; then

line\_count=$(wc -l < "$file\_name")

echo "Number of lines in $file\_name: $line\_count"

else

echo "File $file\_name not found."

fi

}

// Calling the function with different file names

count\_lines\_in\_file "file1.txt"

count\_lines\_in\_file "file2.txt"

count\_lines\_in\_file "file3.txt"

**Assignment 4**

#!/bin/bash

create\_files() {

directory=$1

num\_files=$2

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

mkdir "$directory"

fi

for ((i = 1; i <= num\_files; i++)); do

file\_name="$directory/file${i}.txt"

echo "$file\_name" > "$file\_name"

done

}

// Creating directory and files

create\_files "TestDir" 10

**Assignment 5**

#!/bin/bash

DEBUG=false

create\_files() {

directory=$1

num\_files=$2

if [ -d "$directory" ]; then

echo "Directory '$directory' already exists."

else

mkdir -p "$directory" || { echo "Failed to create directory '$directory'."; return 1; }

echo "Directory '$directory' created."

fi

for ((i = 1; i <= num\_files; i++)); do

file\_name="$directory/file${i}.txt"

if [ -e "$file\_name" ]; then

echo "File '$file\_name' already exists."

else

if touch "$file\_name"; then

echo "$file\_name" > "$file\_name"

echo "File '$file\_name' created."

else

echo "Failed to create file '$file\_name'."

fi

fi

done

}

// Set DEBUG to true to enable debugging

if [ "$DEBUG" = true ]; then

set -x

fi

// Creating directory and files

create\_files "TestDir" 10

**Assignment 6**

#!/bin/bash

logfile="your\_log\_file.log" # Replace "your\_log\_file.log" with the actual name of your log file

grep 'ERROR' "$logfile" | awk '{ print $1, $2, substr($0, index($0,$3)) }'

**Assignment 7**

#!/bin/bash

input\_file="$1" // Input file (passed as command line argument)

old\_text="old\_text" // Text to replace

new\_text="new\_text" // Text to replace with

output\_file="output.txt" # Output file

// Check if input file is provided

if [ -z "$input\_file" ]; then

echo "Usage: $0 <input\_file>"

exit 1

fi

// Check if input file exists

if [ ! -f "$input\_file" ]; then

echo "Error: Input file '$input\_file' not found."

exit 1

fi

// Perform text replacement using sed and write to output file

sed "s/$old\_text/$new\_text/g" "$input\_file" > "$output\_file"

echo "Text replacement completed. Output written to $output\_file"