Assignment-1

1. 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".

Solution:

```
#!/bin/bash

File3="myfile.txt"


if [ -f "$file3" ]; then
   echo "File exists"
else
   echo "File not found"
fi
```

Assignment-2

2. 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.

Solution:

```
#!/bin/bash

while true; do
        read -p "Enter a number (0 to quit): " number
        if [[ "$number" -eq 0 ]]; then
                echo "Exiting---"
                break
       fi
       if [[ $((number % 2)) -eq 0 ];
        then
```

```
            echo "$number is even."
        else
            echo "$number is odd."
        fi
done
```

Assignment-3

3.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.

Solution:

```
#!/bin/bash
count_lines() {
        local file3=$1
        local num_lines=$(wc -l  < "$file3")
        echo "Number of lines in $filename: $num_lines"
}
count_lines "file3.txt"
count_lines "file1.txt"
```

Assignment-4

4. Write a script that creates a directory named TestDir and inside it, creates ten files named File1.txt, File2.txt, ... File10.txt. Each file should contain its filename as its content (e.g., File1.txt contains "File1.txt").

Solution:

```
#!/bin/bash
```

```
mkdir TestDir

cd TestDir || exit



for ((i=1; i<=10; i++))
do
    filename="File${i}.txt"
    echo "$filename" > "$filename"
    echo "Created $filename with content \"$filename\""
 done

echo "Files created successfully in TestDir."
```

Assignment-5

5. Modify the script to handle errors, such as the directory already existing or lacking permissions to create files.

Add a debugging mode that prints additional information when enabled.