

RPS DAY 5 Assignment

Assignment 3

Name: Akshada Baad

Batch - CPPE

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.

#Step1: Create 3 files

```
touch file1.txt
touch file2.txt
touch file3.txt
```

#Step2: Create a Function to count the number of lines in a file

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

```
count_lines_in_file() {
    local filename=$1
```

#Step3: Check if the file exists

```
    if [[ -f "$filename" ]]; then
        local line_count=$(wc -l < "$filename")
        echo "The file '$filename' has $line_count lines."
    else
        echo "The file '$filename' does not exist."
    fi
}
```

#Step4: Call the function with different filenames

```
count_lines_in_file "file1.txt"
count_lines_in_file "file2.txt"
count_lines_in_file "file3.txt"
```

```
onlinegdb.com/online_bash_shell
main.bash file1.txt file2.txt file3.txt
5
6 # touch file1.txt
7 # touch file2.txt
8 # touch file3.txt
9
10 #!/bin/bash
11
12 # Function to count the number of lines in a file
13 count_lines_in_file() {
14     local filename=$1
15
16     # Check if the file exists
17     if [[ -f "$filename" ]]; then
18         local line_count=$(wc -l < "$filename")
19         echo "The file '$filename' has $line_count lines."
20     else
21         echo "The file '$filename' does not exist."
22     fi
23 }
24
25 # Call the function with different filenames
26 count_lines_in_file "file1.txt"
27 count_lines_in_file "file2.txt"
28 count_lines_in_file "file3.txt"
29
The file 'file1.txt' has 15 lines.
The file 'file2.txt' has 1 lines.
The file 'file3.txt' has 4 lines.

..Program finished with exit code 0
Press ENTER to exit console.
```

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").

Step 1: Create 10 files with the same file name as the content in it.

```
touch file1.txt
touch file2.txt
touch file3.txt
touch file4.txt
touch file5.txt
touch file6.txt
touch file7.txt
touch file8.txt
touch file9.txt
touch file10.txt
```

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

#Step 2: Create a variable and store the Directory name

```
dir_name="TestDir"
```

#Step 3: Create the directory

```
mkdir -p "$dir_name"
```

#Step 4: Change to the directory

```
cd "$dir_name" || exit
```

#Step 5: Create ten files with their filenames as content

```
for i in {1..10}; do
    file_name="File${i}.txt"
    echo "$file_name" > "$file_name"
done
```

#Step6: Print the result to verify

```
echo "Created files in $dir_name:"
ls -l
```

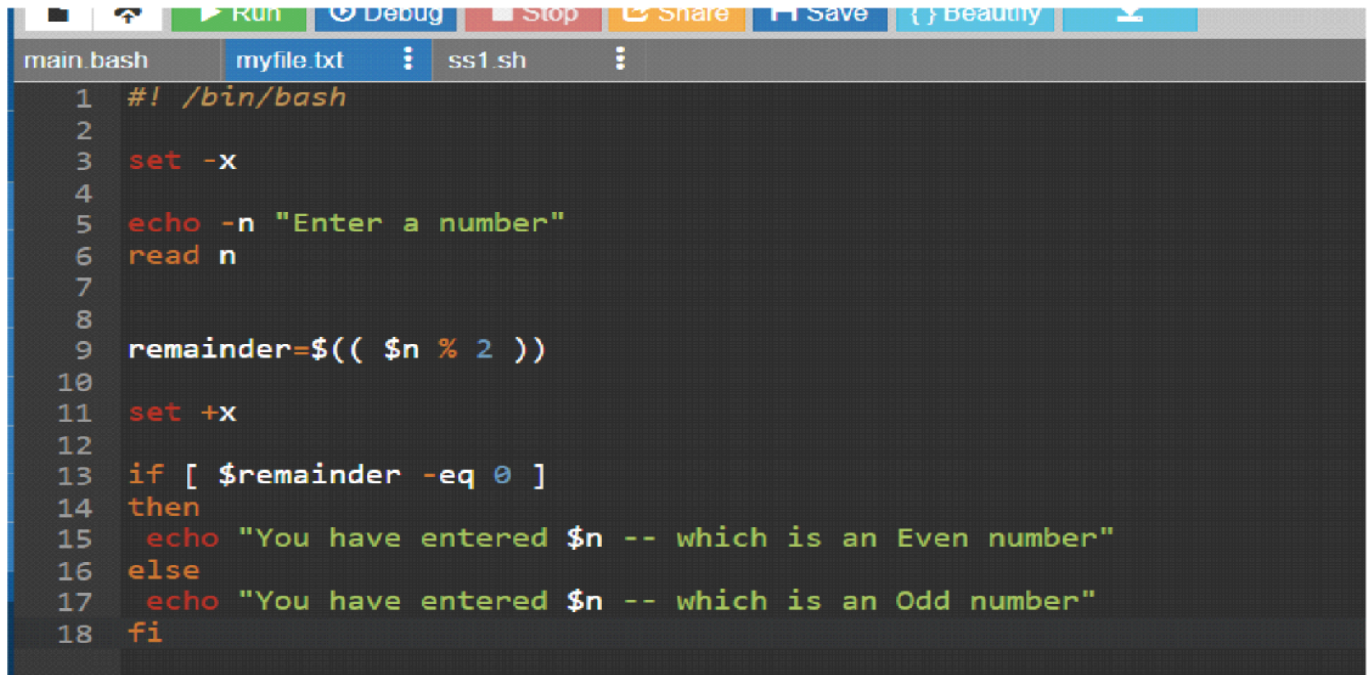
```
onlinegdb.com/online_bash_shell
main.bash | file1.txt | file2.txt | file3.txt | file10.txt | file4.txt | file5.txt | file6.txt | file7.txt | file8.txt
15 # touch file10.txt
16
17 #!/bin/bash
18
19 # Directory name
20 dir_name="TestDir"
21
22 # Create the directory
23 mkdir -p "$dir_name"
24
25 # Change to the directory
26 cd "$dir_name" || exit
27
28 # Create ten files with their filenames as content
29 for i in {1..10}; do
30     file_name="File${i}.txt"
31     echo "$file_name" > "$file_name"
32 done
33
34 # Print the result to verify
35 echo "Created files in $dir_name:"
36 ls -l
37
38
39
input
Created files in TestDir:
total 40
-rw-r--r-- 1 14085 14085 11 May 16 18:48 File10.txt
-rw-r--r-- 1 14085 14085 10 May 16 18:48 File1.txt
-rw-r--r-- 1 14085 14085 10 May 16 18:48 File2.txt
-rw-r--r-- 1 14085 14085 10 May 16 18:48 File3.txt
-rw-r--r-- 1 14085 14085 10 May 16 18:48 File4.txt
-rw-r--r-- 1 14085 14085 10 May 16 18:48 File5.txt
-rw-r--r-- 1 14085 14085 10 May 16 18:48 File6.txt
-rw-r--r-- 1 14085 14085 10 May 16 18:48 File7.txt
-rw-r--r-- 1 14085 14085 10 May 16 18:48 File8.txt
```

```
onlinegdb.com/online_bash_shell
main.bash | file1.txt | file2.txt | file3.txt | file10.txt | file4.txt | file5.txt | file6.txt | file7.txt | file8.txt | file9.txt | TestDir/File1.txt | TestDir/File10.txt
1 File9.txt
2
Language Bash
input
Created files in TestDir:
total 40
-rw-r--r-- 1 14085 14085 11 May 16 18:48 File10.txt
-rw-r--r-- 1 14085 14085 10 May 16 18:48 File1.txt
-rw-r--r-- 1 14085 14085 10 May 16 18:48 File2.txt
-rw-r--r-- 1 14085 14085 10 May 16 18:48 File3.txt
-rw-r--r-- 1 14085 14085 10 May 16 18:48 File4.txt
-rw-r--r-- 1 14085 14085 10 May 16 18:48 File5.txt
-rw-r--r-- 1 14085 14085 10 May 16 18:48 File6.txt
-rw-r--r-- 1 14085 14085 10 May 16 18:48 File7.txt
-rw-r--r-- 1 14085 14085 10 May 16 18:48 File8.txt
-rw-r--r-- 1 14085 14085 10 May 16 18:48 File9.txt
Activate Windows
Go to Settings to activate Windows.
```

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.



```
1  #!/bin/bash
2
3  set -x
4
5  echo -n "Enter a number"
6  read n
7
8
9  remainder=$(( $n % 2 ))
10
11 set +x
12
13 if [ $remainder -eq 0 ]
14 then
15     echo "You have entered $n -- which is an Even number"
16 else
17     echo "You have entered $n -- which is an Odd number"
18 fi
```