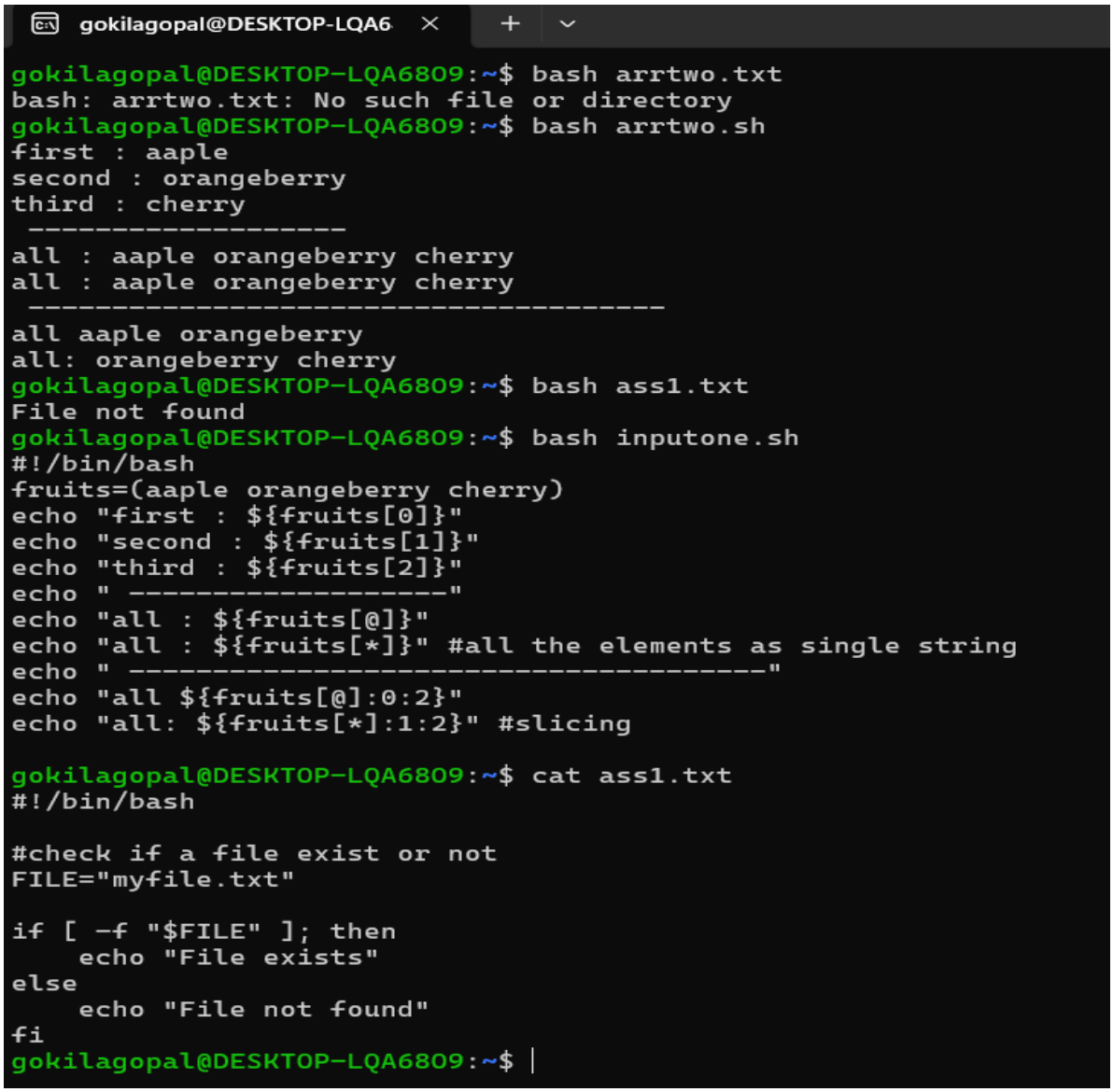
TASK

1. Check whether the given file exist or not



2.Read a number and check it is odd or even until the user enters 0

```
exit
gokilagopal@DESKTOP-LQA68O9:~$ nano assignment2.txt
gokilagopal@DESKTOP-LQA68O9:~$ bash assignment2.txt
enter a value (if you want to exit give the value as 0):29
29 is odd.
enter a value (if you want to exit give the value as 0):30
30 is even.
enter a value (if you want to exit give the value as 0):0
exit
gokilagopal@DESKTOP-LQA68O9:~$ cat assignment2.txt
#!/bin/bash
#check if it is odd or even until user enters 0

while true
do
echo -n "enter a value (if you want to exit give the value as 0):"
read num
if [ "$num" -eq 0 ];then
echo "exit"
break
fi

if [ $((num%2)) -eq 0 ]; then
echo "$num is even."
else
echo "$num is odd."
fi
done

gokilagopal@DESKTOP-LQA68O9:~$
```

3. Function to count number of lines in a file

```
gokilagopal@DESKTOP-LQA68O9:~$ nano assignment3.txt
gokilagopal@DESKTOP-LQA68O9:~$ bash assignment3.txt
the name of the file is :assignment2.txt and has a 19 lines.
the name of the file is :arrtwo.sh and has a 12 lines.
the name of the file is :assarr.txt and has a 15 lines.
gokilagopal@DESKTOP-LQA68O9:~$ cat assignment3.txt
#!/bin/bash
# function to count the number of lines in a files.

countlines()
{
  filename=$1
    if [ -f "$filename" ]; then
     lines=$(wc -l < "$filename")
     echo "the name of the file is :$filename and has a $lines lines."
    else
       echo "The give file does not exist"

     fi
}

countlines assignment2.txt
countlines arrtwo.sh
countlines assarr.txt
gokilagopal@DESKTOP-LQA68O9:~$
```

4 Create directory and 10files inside that directory

```
gokilagopal@DESKTOP-LQA68O9:~$ nano assignment4.txt
gokilagopal@DESKTOP-LQA68O9:~$ bash assignment4.txt
mkdir: cannot create directory ‘TestDirFor10Files’: File exists
Directory and files created successfully
gokilagopal@DESKTOP-LQA68O9:~$ cd TestDirFor10Files
gokilagopal@DESKTOP-LQA68O9:~/TestDirFor10Files$ ls
File1.txt  File10.txt  File2.txt  File3.txt  File4.txt  File5.txt  File6.txt  File7.txt  File8.txt  File9.txt
gokilagopal@DESKTOP-LQA68O9:~/TestDirFor10Files$ cd ~
gokilagopal@DESKTOP-LQA68O9:~$ cat assignment4.txt
#!/bin/bash
# creating a directory with 10 files present inside it

DIR="TestDirFor10Files"

mkdir "$DIR"

for i in {1..10}
do
    filename="$DIR/File$i.txt"
    echo "File$i.txt" > "$filename"
done

echo "Directory and files created successfully"
gokilagopal@DESKTOP-LQA68O9:~$
```

5.Error handling + Debug mode

```
gokilagopal@DESKTOP-LQA68O9:~$ nano assignment5.txt
gokilagopal@DESKTOP-LQA68O9:~$ bash assignment5.txt
Directory exits
Debug: Directory name: TestDirectory
Debug: TestDirectory/File1.txt created
Debug: TestDirectory/File2.txt created
Debug: TestDirectory/File3.txt created
Debug: TestDirectory/File4.txt created
Debug: TestDirectory/File5.txt created
Debug: TestDirectory/File6.txt created
Debug: TestDirectory/File7.txt created
Debug: TestDirectory/File8.txt created
Debug: TestDirectory/File9.txt created
Debug: TestDirectory/File10.txt created
All files created successfully
gokilagopal@DESKTOP-LQA68O9:~$ cat assignment5.txt
#!/bin/bash
#error handling+debug mode

DIR="TestDirectory"
Debug=1   #Change 0 that indicates to false and to disable debugging.

if_debug()
{
 if [ "$Debug" -eq 1 ]; then
echo "Debug: $1"
fi
}

if [ -d "$DIR" ]; then
echo "Directory exits"
  if_debug "Directory name: $DIR"
   else
      mkdir "$DIR"
      if [ $? -ne 0 ]; then
        echo "Error: cannot create directory"
exit 1
fi

if_debug "Directory created successfully"
fi

for i in 1 2 3 4 5 6 7 8 9 10
do
    file="$DIR/File$i.txt"
    echo "File$i.txt" > "$file"

if [ $? -ne 0 ]; then
echo "Error: cannot create $file"
exit 1
fi

if_debug "$file created"
done
echo "All files created successfully"
```

6. create a sample file which has to be in log data type awk is used to print the date and time

```
gokilagopal@DESKTOP-LQA68O9:~$ nano logFile6.log
gokilagopal@DESKTOP-LQA68O9:~$ cat logFile6.log
2025-12-16 09:10:12 INFO Application started
2025-12-16 09:12:45 ERROR Database connection failed
2025-12-16 09:15:30 WARNING Low memory
2025-12-16 09:18:20 ERROR File not found

gokilagopal@DESKTOP-LQA68O9:~$ grep "ERROR" logFile6.log | awk '{print $1, $2, $4, $5, $6, $7}'
2025-12-16 09:12:45 Database connection failed
2025-12-16 09:18:20 File not found
gokilagopal@DESKTOP-LQA68O9:~$
```

7 Replace text using sed and save to new file

```
gokilagopal@DESKTOP-LQA68O9:~$ nano assignment7.txt
gokilagopal@DESKTOP-LQA68O9:~$ bash assignment7.txt
Process Executed successfully & the output is saved to output.txt
gokilagopal@DESKTOP-LQA68O9:~$ cat inputFile7.txt
old_text is here
this line has old_text
old_text should change
gokilagopal@DESKTOP-LQA68O9:~$ cat assignment7.txt
#!/bin/bash
#create a file that changes a (oldtext_) into a newtext (changes is only tha
t word

input_file_name="inputFile7.txt"
output_file_name="output.txt"

sed 's/old_text/new_text/g' "$input_file_name">"$output_file_name"
echo "Process Executed successfully & the output is saved to $output_file_na
me"
gokilagopal@DESKTOP-LQA68O9:~$ cat output.txt
new_text is here
this line has new_text
new_text should change
gokilagopal@DESKTOP-LQA68O9:~$
```