Shubham P. Kumbhar

Wipro Assignments

Shell Scripting With Bash

Assignment 1 To 7

Assignment 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".

Answer →

Commands which using for finding the file in directory:

1.Check any file in this directory : ls

2.Creating the script or writing the code : nano filecheck.sh

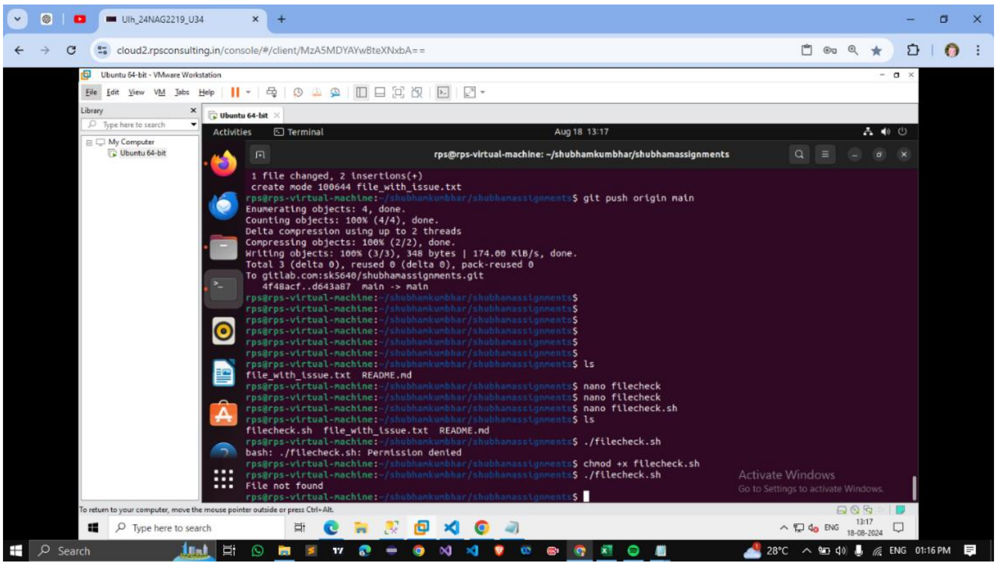
3.write script code in filecheck.sh

```
#!/bin/bash

filename="myfile.txt"

if [ -f "$filename" ]; then

     echo "File exists"

 else

     echo "File not found"

 fi
```

4.Make the script executable by running: chmod +x filecheck.sh

5.Run the Script : ./check_file.sh

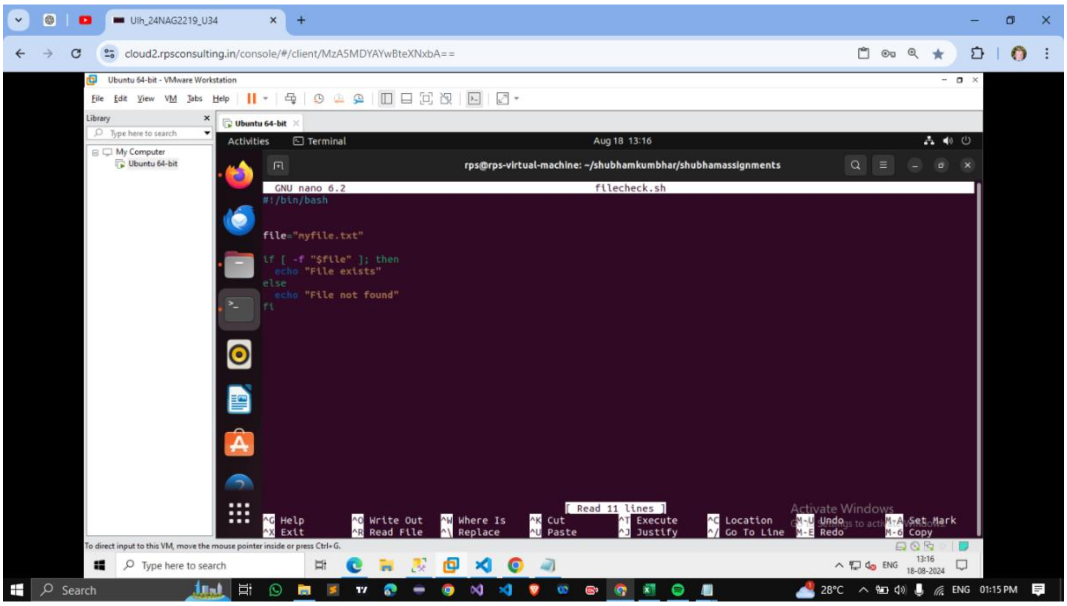
Output : File not found (because “myfile.txt” is not found in current directory)



Ulh_24NAG2219_U34
cloud2.rpsconsulting.in/console/#/client/MzA5MDYAYwBteXNxbA==
Ubuntu 64-bit - VMware Workstation
Ubuntu 64-bit
Activities
Terminal
Aug 18 13:17
rps@rps-virtual-machine: ~/shubhamkumbhar/shubhamassignments
Activate Windows
Go to Settings to activate Windows.
To return to your computer, move the mouse pointer outside or press Ctrl+Alt.
13:17
18-08-2024
28°C
ENG
01:16 PM

```
 1 file changed, 2 insertions(+)
 create mode 100644 file_with_issue.txt
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$ git push origin main
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 2 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 348 bytes | 174.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
To gitlab.com:sk5640/shubhamassignments.git
   4f48acf..d643a87  main -> main
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$ ls
file_with_issue.txt  README.md
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$ nano filecheck
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$ nano filecheck
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$ nano filecheck.sh
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$ ls
filecheck.sh  file_with_issue.txt  README.md
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$ ./filecheck.sh
bash: ./filecheck.sh: Permission denied
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$ chmod +x filecheck.sh
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$ ./filecheck.sh
File not found
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
```

File finding script code



```
#!/bin/bash


file="myfile.txt"

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

Assignment 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.

Answer →

Commands which using for finding the file in directory:

1.Check any file in this directory : ls

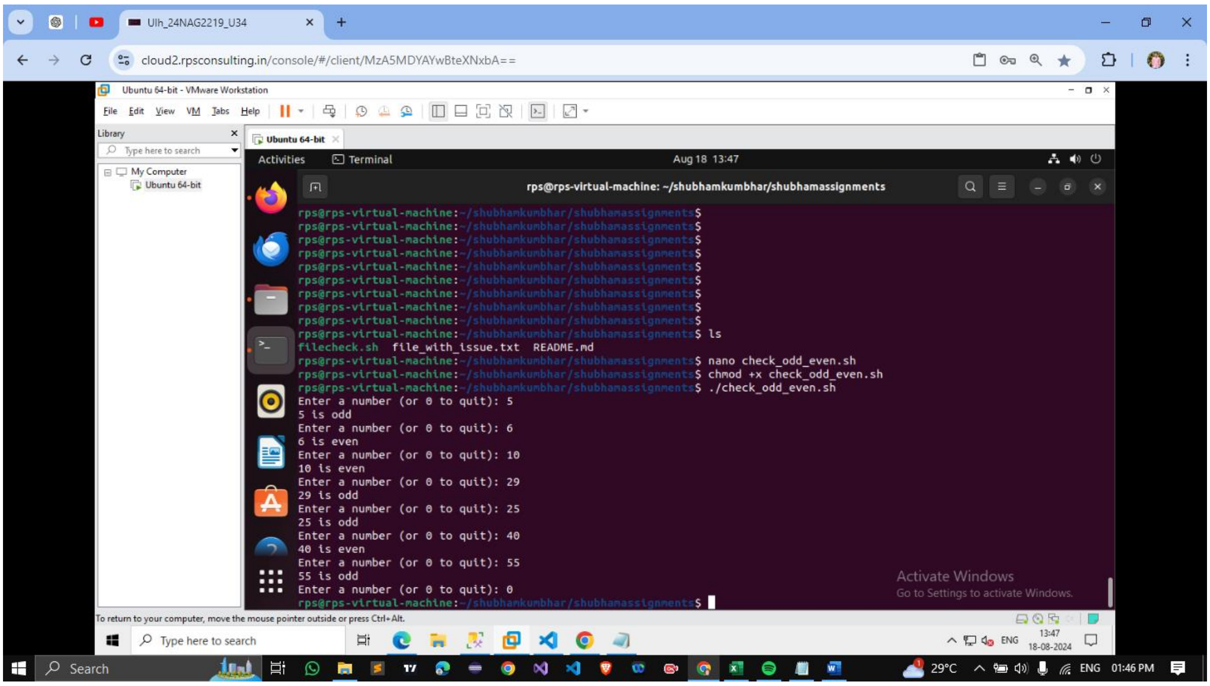
2.Creating the script or writing the code : nano check_odd_even.sh

3.write script code in check_odd_even.sh

```
#!/bin/bash


while true; do


  read -p "Enter a number (0 to stop): " num


  if [ "$num" -eq 0 ]; then
    break
  fi


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

4.Make the script executable by running: chmod +x check_odd_even.sh

5.Run the Script : ./check_odd_even.sh



```
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$ ls
filecheck.sh  file_with_issue.txt  README.md
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$ nano check_odd_even.sh
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$ chmod +x check_odd_even.sh
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$ ./check_odd_even.sh
Enter a number (or 0 to quit): 5
5 is odd
Enter a number (or 0 to quit): 6
6 is even
Enter a number (or 0 to quit): 10
10 is even
Enter a number (or 0 to quit): 29
29 is odd
Enter a number (or 0 to quit): 25
25 is odd
Enter a number (or 0 to quit): 40
40 is even
Enter a number (or 0 to quit): 55
55 is odd
Enter a number (or 0 to quit): 0
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
```

Assignment 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.

Answer →

Commands which using for finding the file in directory:

1.Check any file in this directory : ls

2.Creating the script or writing the code : nano count_lines_in_file.sh

3.write script code in check_odd_even.sh

```
#!/bin/bash

count_lines() {

   local file=”$1”

   if [ -f "$file" ]; then

      echo "Number of lines in file: $(wc -l < “$file”)"

   else

      echo "File not found: $file"
```

  fi

}

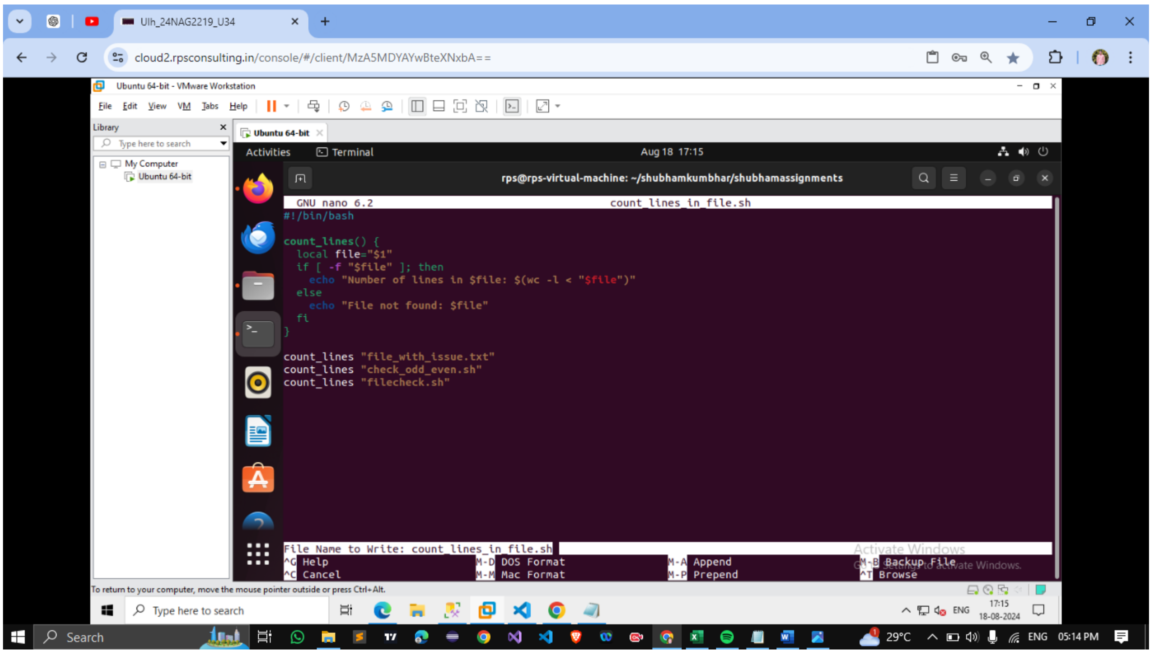
count_lines"file_with_issue.txt"

count_lines"check_odd_even.sh"

count_lines "filecheck.sh"

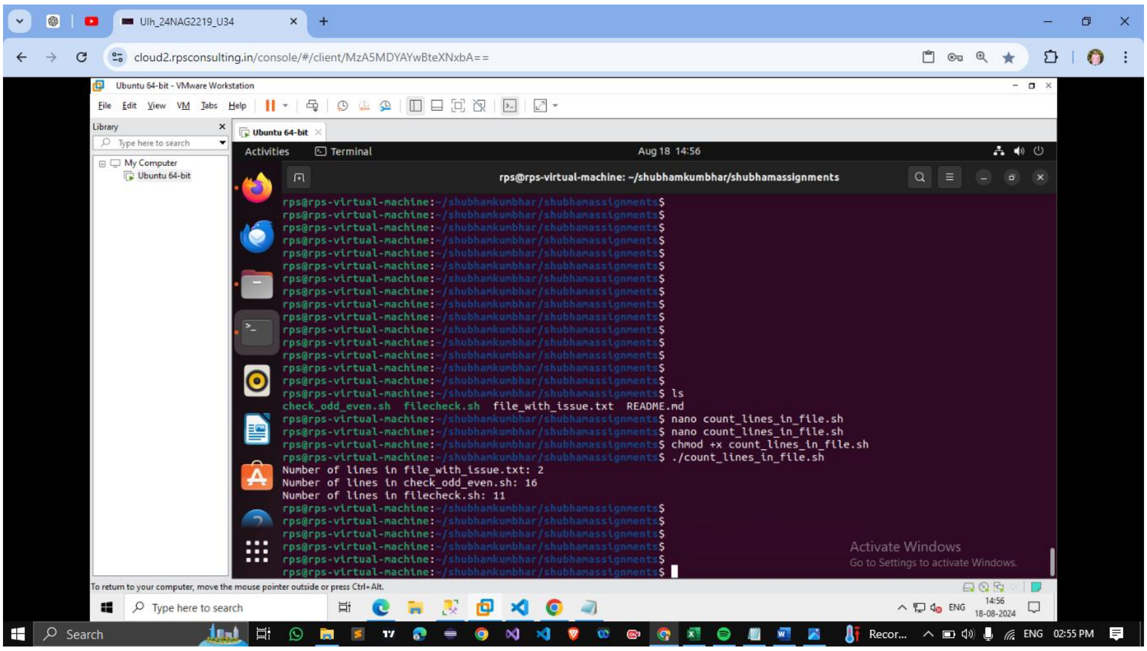
4.Make the script executable by running: chmod +x count_lines_in_file.sh

5.Run the Script : ./ count_lines_in_file.sh



```
  GNU nano 6.2                                     count_lines_in_file.sh
#!/bin/bash

count_lines() {
  local file="$1"
  if [ -f "$file" ]; then
    echo "Number of lines in $file: $(wc -l < "$file")"
  else
    echo "File not found: $file"
  fi
}

count_lines "file_with_issue.txt"
count_lines "check_odd_even.sh"
count_lines "filecheck.sh"

File Name to Write: count_lines_in_file.sh
^G Help          M-D DOS Format      M-A Append         M-B Backup File
^C Cancel        M-M Mac Format      M-P Prepend        ^T Browse
```

Ulh_24NAG2219_U34
cloud2.rpsconsulting.in/console/#/client/MzA5MDYAYwBteXNxbA==
Ubuntu 64-bit - VMware Workstation
File Edit View VM Tabs Help
Library
Type here to search
My Computer
Ubuntu 64-bit
Activities
Terminal
Aug 18 17:15
rps@rps-virtual-machine: ~/shubhamkumbhar/shubhamassignments
To return to your computer, move the mouse pointer outside or press Ctrl+Alt.
Type here to search
ENG
17:15
18-08-2024
Search
29°C
05:14 PM



```
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$ ls
check_odd_even.sh  filecheck.sh  file_with_issue.txt  README.md
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$ nano count_lines_in_file.sh
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$ nano count_lines_in_file.sh
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$ chmod +x count_lines_in_file.sh
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$ ./count_lines_in_file.sh
Number of lines in file_with_issue.txt: 2
Number of lines in check_odd_even.sh: 16
Number of lines in filecheck.sh: 11
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
```

Ulh_24NAG2219_U34
cloud2.rpsconsulting.in/console/#/client/MzA5MDYAYwBteXNxbA==
Ubuntu 64-bit - VMware Workstation
File Edit View VM Tabs Help
Library
Type here to search
My Computer
Ubuntu 64-bit
Activities
Terminal
Aug 18 14:56
rps@rps-virtual-machine: ~/shubhamkumbhar/shubhamassignments
Activate Windows
Go to Settings to activate Windows.
To return to your computer, move the mouse pointer outside or press Ctrl+Alt.
Type here to search
ENG
14:56
18-08-2024
Search
Recor...
02:55 PM

Assignment 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").

Answer→

Commands which using for finding the file in directory:

1.Check any file in this directory : ls

2.Creating the script or writing the code : nano file_creation.sh

3.write script code in check_odd_even.sh

```
#!/bin/bash

dir=”TestDir”


if [ -d “$dir” ]; then

  echo “Directory $dir already exists”

else

mkdir “$dir”

for i in {1..10}; do

file=”File$i.txt”

echo “$file” > “$dir/$file”

done

echo “Directory $dir created with 10 files”

fi
```

4.Make the script executable by running: chmod +x file_creation.sh

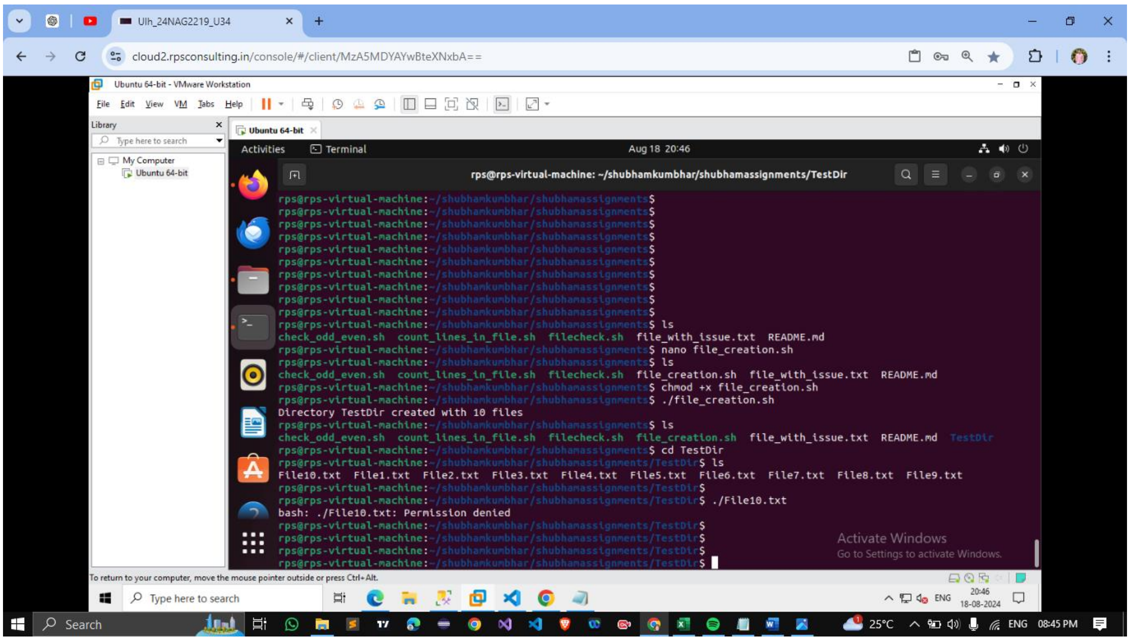
5.Run the Script : ./ file_creation.sh

6. Check “file_creation.sh” file & “TestDir” directory in this directory : ls

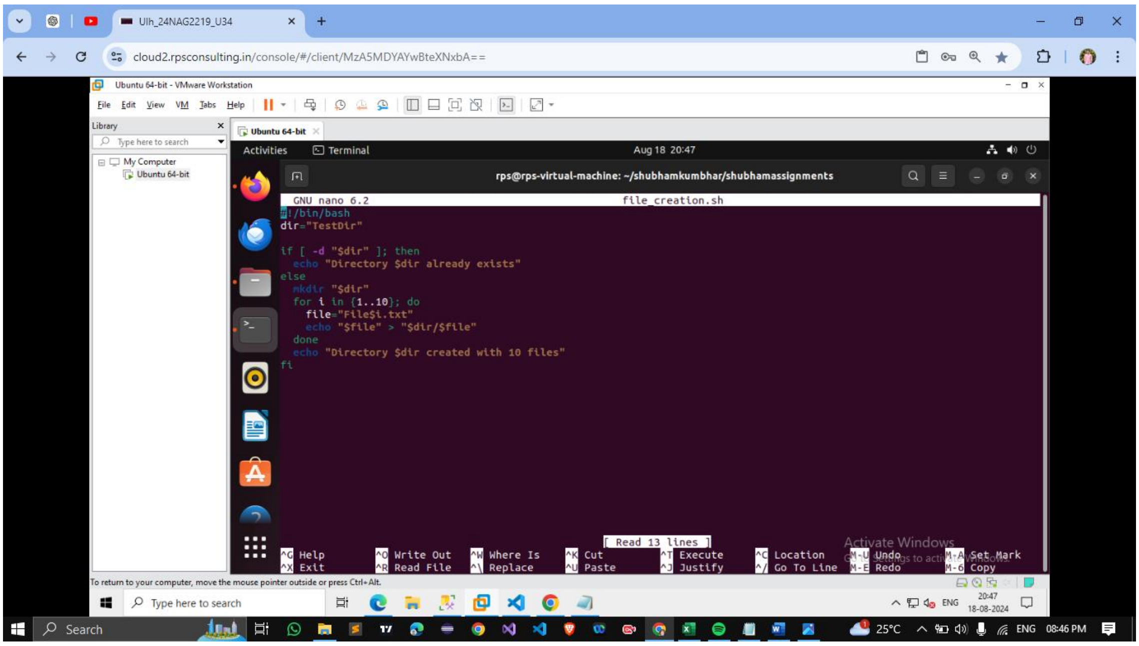
7.go to TestDir directory : cd TestDir

8.Check 10 files are created or not : ls

9.Run any file from this directory : ./File10.txt


UIh_24NAG2219_U34
cloud2.rpsconsulting.in/console/#/client/MzA5MDYAYwBteXNxbA==
Ubuntu 64-bit - VMware Workstation
Ubuntu 64-bit
Activities
Terminal
Aug 18 20:46
rps@rps-virtual-machine: ~/shubhamkumbhar/shubhamassignments/TestDir
To return to your computer, move the mouse pointer outside or press Ctrl+Alt.

```
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$ ls
check_odd_even.sh  count_lines_in_file.sh  filecheck.sh  file_with_issue.txt  README.md
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$ nano file_creation.sh
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$ ls
check_odd_even.sh  count_lines_in_file.sh  filecheck.sh  file_creation.sh  file_with_issue.txt  README.md
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$ chmod +x file_creation.sh
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$ ./file_creation.sh
Directory TestDir created with 10 files
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$ ls
check_odd_even.sh  count_lines_in_file.sh  filecheck.sh  file_creation.sh  file_with_issue.txt  README.md  TestDir
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$ cd TestDir
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments/TestDir$ ls
File10.txt  File1.txt  File2.txt  File3.txt  File4.txt  File5.txt  File6.txt  File7.txt  File8.txt  File9.txt
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments/TestDir$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments/TestDir$ ./File10.txt
bash: ./File10.txt: Permission denied
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments/TestDir$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments/TestDir$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments/TestDir$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments/TestDir$
```


UIh_24NAG2219_U34
cloud2.rpsconsulting.in/console/#/client/MzA5MDYAYwBteXNxbA==
Ubuntu 64-bit - VMware Workstation
Ubuntu 64-bit
Activities
Terminal
Aug 18 20:47
rps@rps-virtual-machine: ~/shubhamkumbhar/shubhamassignments
To return to your computer, move the mouse pointer outside or press Ctrl+Alt.

```
  GNU nano 6.2                          file_creation.sh
#!/bin/bash
dir="TestDir"

if [ -d "$dir" ]; then
  echo "Directory $dir already exists"
else
  mkdir "$dir"
  for i in {1..10}; do
    file="File$i.txt"
    echo "$file" > "$dir/$file"
  done
  echo "Directory $dir created with 10 files"
fi

                                  [ Read 13 lines ]
^G Help       ^O Write Out  ^W Where Is   ^K Cut        ^T Execute    ^C Location   M-U Undo      M-A Set Mark
^X Exit       ^R Read File  ^\ Replace    ^U Paste      ^J Justify    ^/ Go To Line M-E Redo      M-6 Copy
```

Assignment 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.

Answer →

Commands which using for finding the file in directory:

1.Check any file in this directory : ls

2.Creating the script or writing the code : nano create_files.sh

3.write script code in create_files.sh

```
#!/bin/bash
dir=”TestDir”
Debug=false
If [ “$1” = “-d” ]; then
  Debug=true
Shift
fi

if [ -d “$dir” ]; then
  if $debug; then
  echo “Debug: Directory $dir already exists”
fi
 echo “Directory $dir already exists”
else
  if $debug; then
   echo “Debug: Creating directory $dir”
fi
mkdir “$dir” || {
  echo “Error: Unable to create directory $dir”
exit 1
}
```

```
for i in {1..10}; do
file=”File$i.txt”
if $debug; then
   echo “Debug: Creating file $file”
fi
  echo “$file” > “$dir/$file” | | {
     echo “Error: Unable to create file $file”
exit 1
}
done
echo “Directory $dir created with 10 files”
fi
```

4.Make the script executable by running: chmod +x create_files.sh

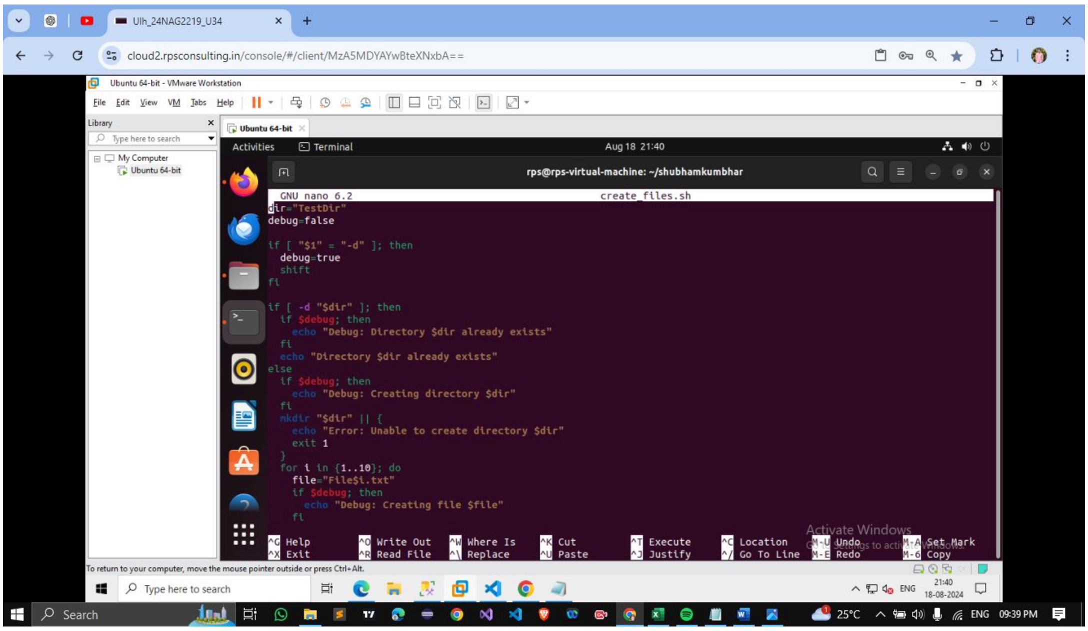
5.Run the Script : ./ create_files.sh

6. Check “create_files.sh” file & “TestDir” directory in this directory : ls

7.change the current directory to TestDir directory : cd TestDir

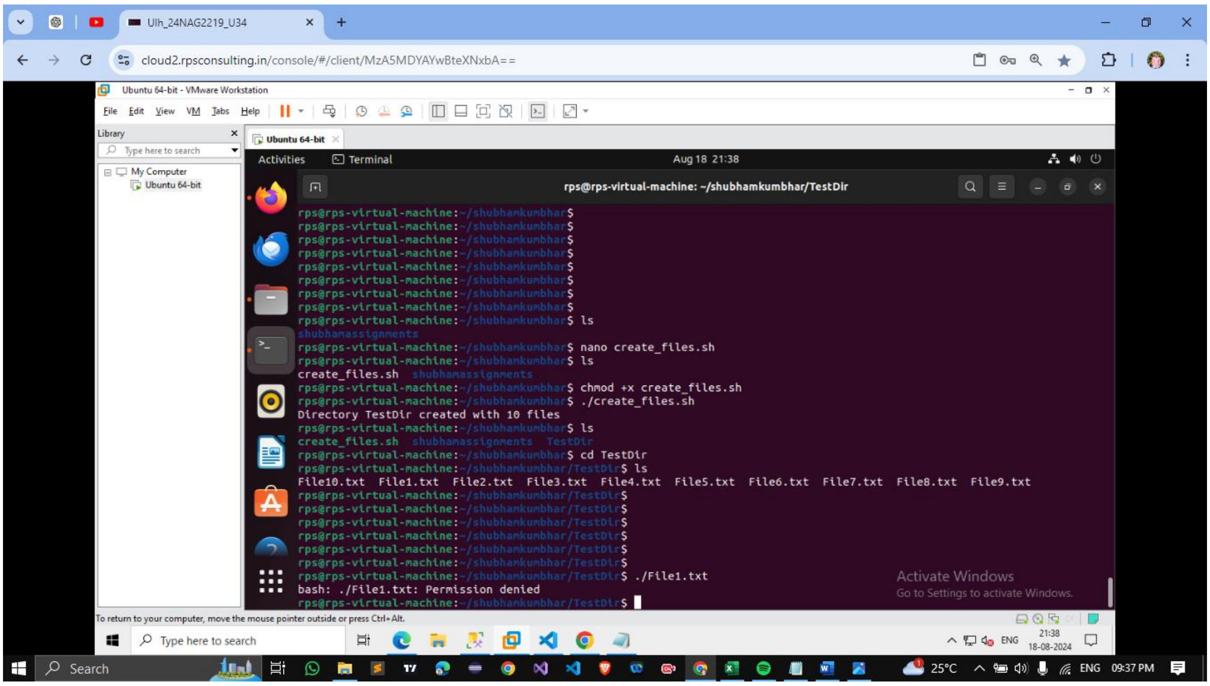
8.Check 10 files are created or not : ls

9.Run any file from this directory : ./File10.txt



```
  GNU nano 6.2                                create_files.sh
dir="TestDir"
debug=false

if [ "$1" = "-d" ]; then
  debug=true
  shift
fi

if [ -d "$dir" ]; then
  if $debug; then
    echo "Debug: Directory $dir already exists"
  fi
  echo "Directory $dir already exists"
else
  if $debug; then
    echo "Debug: Creating directory $dir"
  fi
  mkdir "$dir" || {
    echo "Error: Unable to create directory $dir"
    exit 1
  }
  for i in {1..10}; do
    file="File$i.txt"
    if $debug; then
      echo "Debug: Creating file $file"
    fi
```

Uih_24NAG2219_U34
cloud2.rpsconsulting.in/console/#/client/MzA5MDYAYwBteXNxbA==
Ubuntu 64-bit - VMware Workstation
Library
My Computer
Ubuntu 64-bit
Activities
Terminal
Aug 18 21:40
rps@rps-virtual-machine: ~/shubhamkumbhar
^G Help ^O Write Out ^W Where Is ^K Cut ^T Execute ^C Location M-U Undo M-A Set Mark
^X Exit ^R Read File ^\ Replace ^U Paste ^J Justify ^/ Go To Line M-E Redo M-6 Copy
Activate Windows
To return to your computer, move the mouse pointer outside or press Ctrl+Alt.
Type here to search
21:40 18-08-2024
Search
25°C ENG 09:39 PM



```
rps@rps-virtual-machine:~/shubhamkumbhar$
rps@rps-virtual-machine:~/shubhamkumbhar$
rps@rps-virtual-machine:~/shubhamkumbhar$
rps@rps-virtual-machine:~/shubhamkumbhar$
rps@rps-virtual-machine:~/shubhamkumbhar$
rps@rps-virtual-machine:~/shubhamkumbhar$
rps@rps-virtual-machine:~/shubhamkumbhar$
rps@rps-virtual-machine:~/shubhamkumbhar$
rps@rps-virtual-machine:~/shubhamkumbhar$ ls
shubhamassignments
rps@rps-virtual-machine:~/shubhamkumbhar$ nano create_files.sh
rps@rps-virtual-machine:~/shubhamkumbhar$ ls
create_files.sh  shubhamassignments
rps@rps-virtual-machine:~/shubhamkumbhar$ chmod +x create_files.sh
rps@rps-virtual-machine:~/shubhamkumbhar$ ./create_files.sh
Directory TestDir created with 10 files
rps@rps-virtual-machine:~/shubhamkumbhar$ ls
create_files.sh  shubhamassignments  TestDir
rps@rps-virtual-machine:~/shubhamkumbhar$ cd TestDir
rps@rps-virtual-machine:~/shubhamkumbhar/TestDir$ ls
File10.txt  File1.txt  File2.txt  File3.txt  File4.txt  File5.txt  File6.txt  File7.txt  File8.txt  File9.txt
rps@rps-virtual-machine:~/shubhamkumbhar/TestDir$
rps@rps-virtual-machine:~/shubhamkumbhar/TestDir$
rps@rps-virtual-machine:~/shubhamkumbhar/TestDir$
rps@rps-virtual-machine:~/shubhamkumbhar/TestDir$
rps@rps-virtual-machine:~/shubhamkumbhar/TestDir$
rps@rps-virtual-machine:~/shubhamkumbhar/TestDir$
rps@rps-virtual-machine:~/shubhamkumbhar/TestDir$ ./File1.txt
bash: ./File1.txt: Permission denied
rps@rps-virtual-machine:~/shubhamkumbhar/TestDir$
```

Ulh_24NAG2219_U34
cloud2.rpsconsulting.in/console/#/client/MzA5MDYAYwBteXNxbA==
Ubuntu 64-bit - VMware Workstation
File Edit View VM Tabs Help
Library
Type here to search
My Computer
Ubuntu 64-bit
Activities
Terminal
Aug 18 21:38
rps@rps-virtual-machine: ~/shubhamkumbhar/TestDir
Activate Windows
Go to Settings to activate Windows.
To return to your computer, move the mouse pointer outside or press Ctrl+Alt.
Type here to search
ENG
21:38
18-08-2024
Search
25°C
ENG
09:37 PM

Assignment 6:

Given a samplelog file, write a script using grep to extract all lines containing "Error".Use awk to print the date,time,and error message of each extracted line

Data processing with sed

Answer →

1.Create a Sample Log File : cat >samplelog.txt

```
2024-08-17 10:15:32 Info: System started successfully.
2024-08-17 10:17:45 Error: Unable to connect to database.
2024-08-17 10:19:11 Warning: Disk space low.
2024-08-17 10:21:54 Error: Failed to load configuration file.
2024-08-17 10:25:33 Info: Backup completed successfully.
2024-08-17 10:27:12 Error: Timeout occurred while connecting to server.
```

2.Creating the script or writing the code : nano process_log.sh

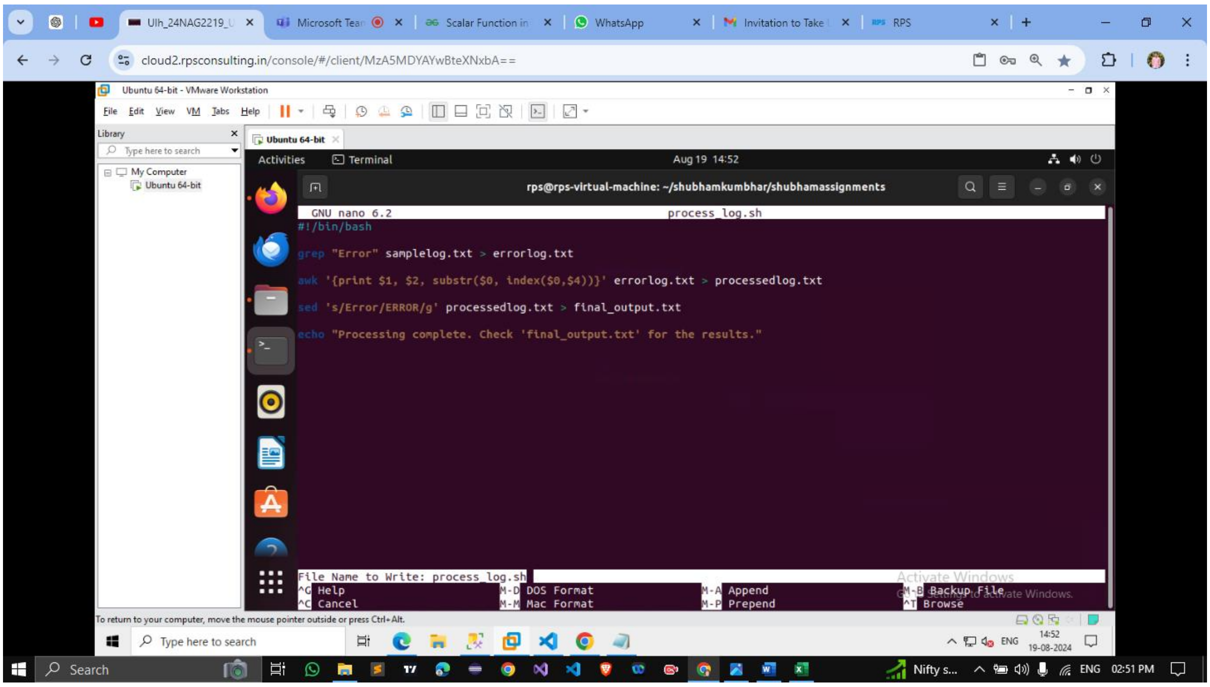
3.write script code in process_log.sh :

```
#!/bin/bash

grep "Error" samplelog.txt > errorlog.txt

awk '{print $1, $2, substr($0, index($0,$4))}' errorlog.txt > processedlog.txt

sed 's/Error/ERROR/g' processedlog.txt > final_output.txt

echo "Processing complete. Check 'final_output.txt' for the results."
```

4. Make the Script Executable : chmod +x process_log.sh

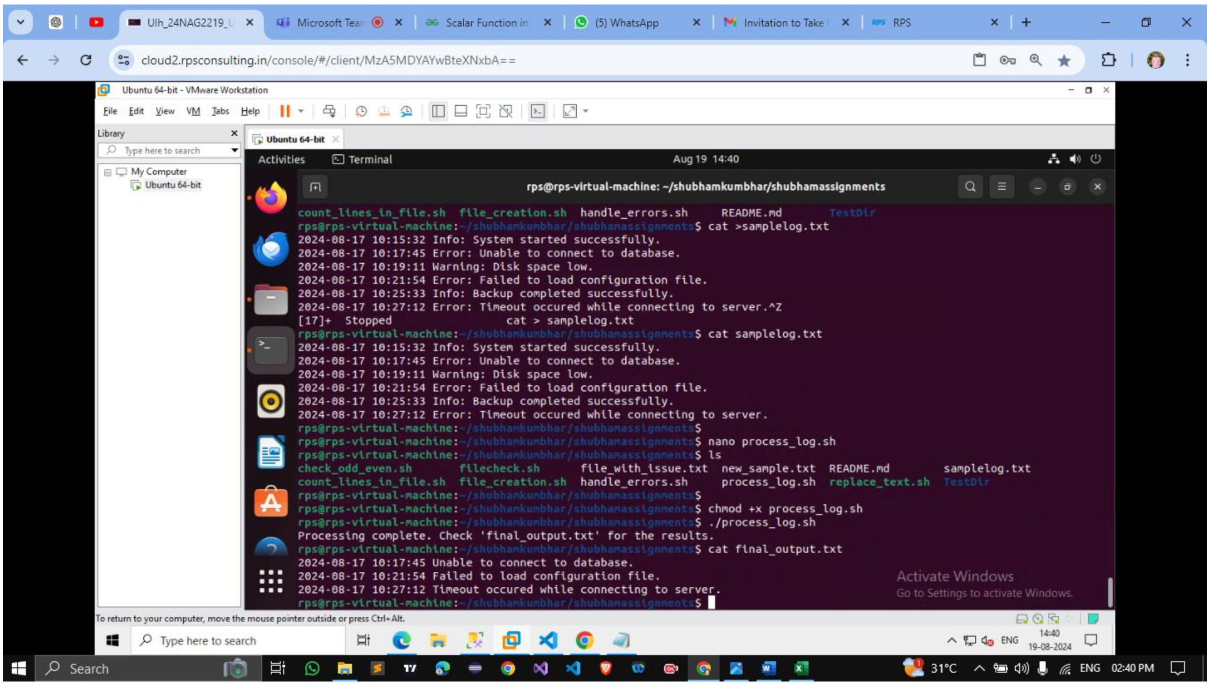
5. Run the Script : ./process_log.sh

6. Check the Output : cat final_output.txt



```
rps@rps-virtual-machine: ~/shubhamkumbhar/shubhamassignments
 GNU nano 6.2                              process_log.sh
#!/bin/bash

grep "Error" samplelog.txt > errorlog.txt

awk '{print $1, $2, substr($0, index($0,$4))}' errorlog.txt > processedlog.txt

sed 's/Error/ERROR/g' processedlog.txt > final_output.txt

echo "Processing complete. Check 'final_output.txt' for the results."






File Name to Write: process_log.sh
^G Help            M-D DOS Format       M-A Append          M-B Backup File
^C Cancel          M-M Mac Format       M-P Prepend         ^T Browse
```

cloud2.rpsconsulting.in/console/#/client/MzA5MDYAYwBteXNxbA==
Ubuntu 64-bit - VMware Workstation
Ubuntu 64-bit
Activities
Terminal
Aug 19 14:52
To return to your computer, move the mouse pointer outside or press Ctrl+Alt.
Activate Windows



Ubuntu 64-bit - VMware Workstation
Activities
Terminal
Aug 19 14:40
rps@rps-virtual-machine: ~/shubhamkumbhar/shubhamassignments
Activate Windows
Go to Settings to activate Windows.

```
count_lines_in_file.sh  file_creation.sh  handle_errors.sh     README.md        TestDir
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$ cat >samplelog.txt
2024-08-17 10:15:32 Info: System started successfully.
2024-08-17 10:17:45 Error: Unable to connect to database.
2024-08-17 10:19:11 Warning: Disk space low.
2024-08-17 10:21:54 Error: Failed to load configuration file.
2024-08-17 10:25:33 Info: Backup completed successfully.
2024-08-17 10:27:12 Error: Timeout occured while connecting to server.^Z
[17]+  Stopped                 cat > samplelog.txt
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$ cat samplelog.txt
2024-08-17 10:15:32 Info: System started successfully.
2024-08-17 10:17:45 Error: Unable to connect to database.
2024-08-17 10:19:11 Warning: Disk space low.
2024-08-17 10:21:54 Error: Failed to load configuration file.
2024-08-17 10:25:33 Info: Backup completed successfully.
2024-08-17 10:27:12 Error: Timeout occured while connecting to server.
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$ nano process_log.sh
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$ ls
check_odd_even.sh       filecheck.sh      file_with_issue.txt  new_sample.txt  README.md        samplelog.txt
count_lines_in_file.sh  file_creation.sh  handle_errors.sh     process_log.sh  replace_text.sh  TestDir
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$ chmod +x process_log.sh
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$ ./process_log.sh
Processing complete. Check 'final_output.txt' for the results.
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$ cat final_output.txt
2024-08-17 10:17:45 Unable to connect to database.
2024-08-17 10:21:54 Failed to load configuration file.
2024-08-17 10:27:12 Timeout occured while connecting to server.
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
```

Assignment 7:

Create a script that takes a text file and replaces all occurences of "old_text" with "new_text".Use sed to perform this operation and output the result to a new file.

Answer: →

1.Create the sample text file with some data: cat > sample.txt

This is the old_text that needs to be replaced.

Here is another line with old_text that should also be replaced.

Finally, one more occurrence of old_text.

2.Creating the script or writing the code : nano replace_text.sh

3.write script code in replace_text.sh

```
#!/bin/bash

if [ "$#" -ne 3 ]; then

  echo "Usage: $0 filename old_text new_text"

  exit 1

fi
```

filename=$1

old_text=$2

new_text=$3

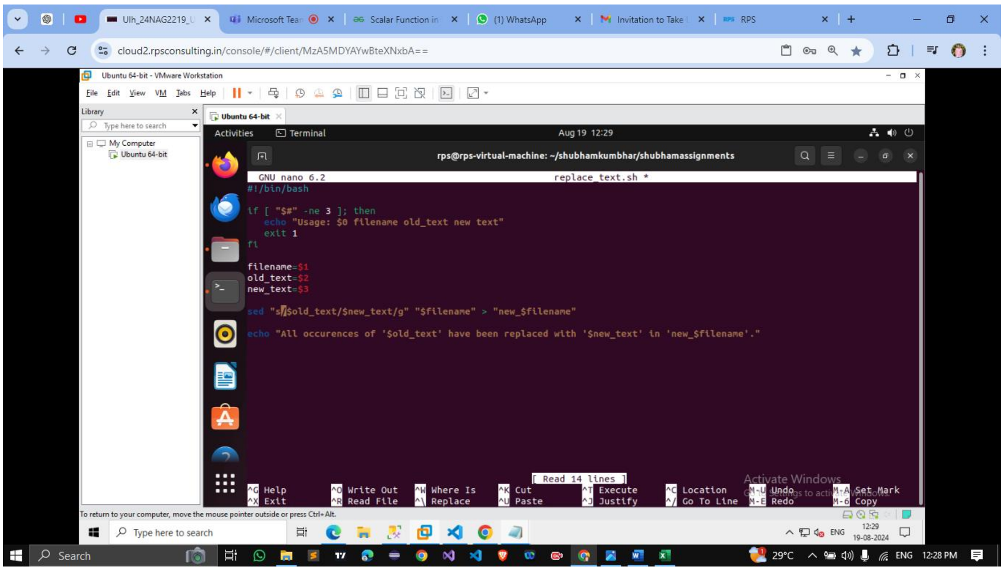
sed "s/$old_text/$new_text/g" "$filename" > "new_$filename"

echo "All occurrences of '$old_text' have been replaced with '$new_text' in 'new_$filename'."

4.Make the script executable by running: chmod +x replace_text.sh

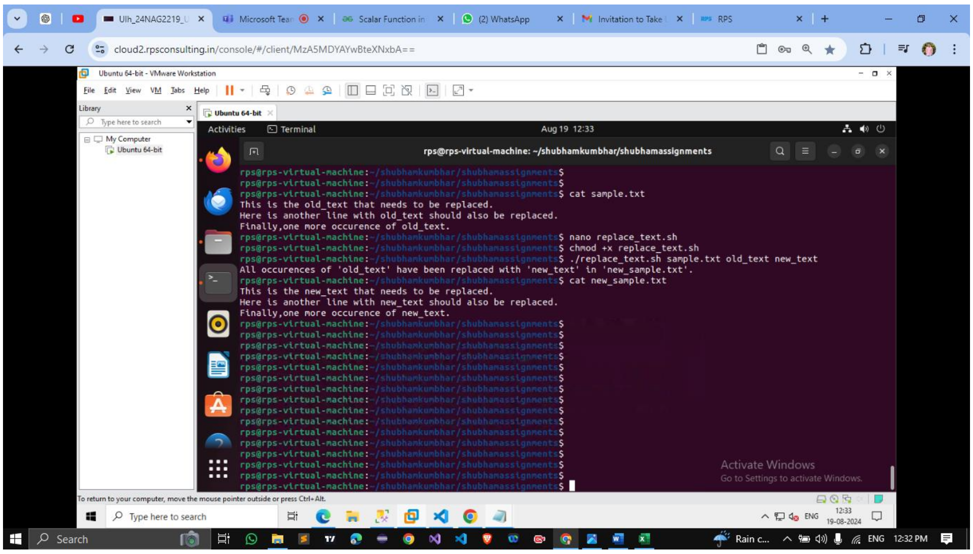
5.Run the Script and Check Output: ./replace_text.sh sample.txt old_text new_text

6. After running the script, check the contents of new_sample.txt: cat new_sample.txt



Activities
Terminal
Aug 19 12:29
rps@rps-virtual-machine: ~/shubhamkumbhar/shubhamassignments

```
  GNU nano 6.2                         replace_text.sh *
#!/bin/bash

if [ "$#" -ne 3 ]; then
    echo "Usage: $0 filename old_text new text"
    exit 1
fi

filename=$1
old_text=$2
new_text=$3

sed "s/$old_text/$new_text/g" "$filename" > "new_$filename"

echo "All occurences of '$old_text' have been replaced with '$new_text' in 'new_$filename'."

                              [ Read 14 lines ]
^G Help       ^O Write Out  ^W Where Is   ^K Cut        ^T Execute    ^C Location   M-U Undo      M-A Set Mark
^X Exit       ^R Read File  ^\ Replace    ^U Paste      ^J Justify    ^/ Go To Line M-E Redo      M-6 Copy
```



Activities
Terminal
Aug 19 12:33
rps@rps-virtual-machine: ~/shubhamkumbhar/shubhamassignments

```
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$ cat sample.txt
This is the old_text that needs to be replaced.
Here is another line with old_text should also be replaced.
Finally,one more occurence of old_text.
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$ nano replace_text.sh
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$ chmod +x replace_text.sh
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$ ./replace_text.sh sample.txt old_text new_text
All occurences of 'old_text' have been replaced with 'new_text' in 'new_sample.txt'.
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$ cat new_sample.txt
This is the new_text that needs to be replaced.
Here is another line with new_text should also be replaced.
Finally,one more occurence of new_text.
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
rps@rps-virtual-machine:~/shubhamkumbhar/shubhamassignments$
```