

Assignment Day 8 | 9th December 2020

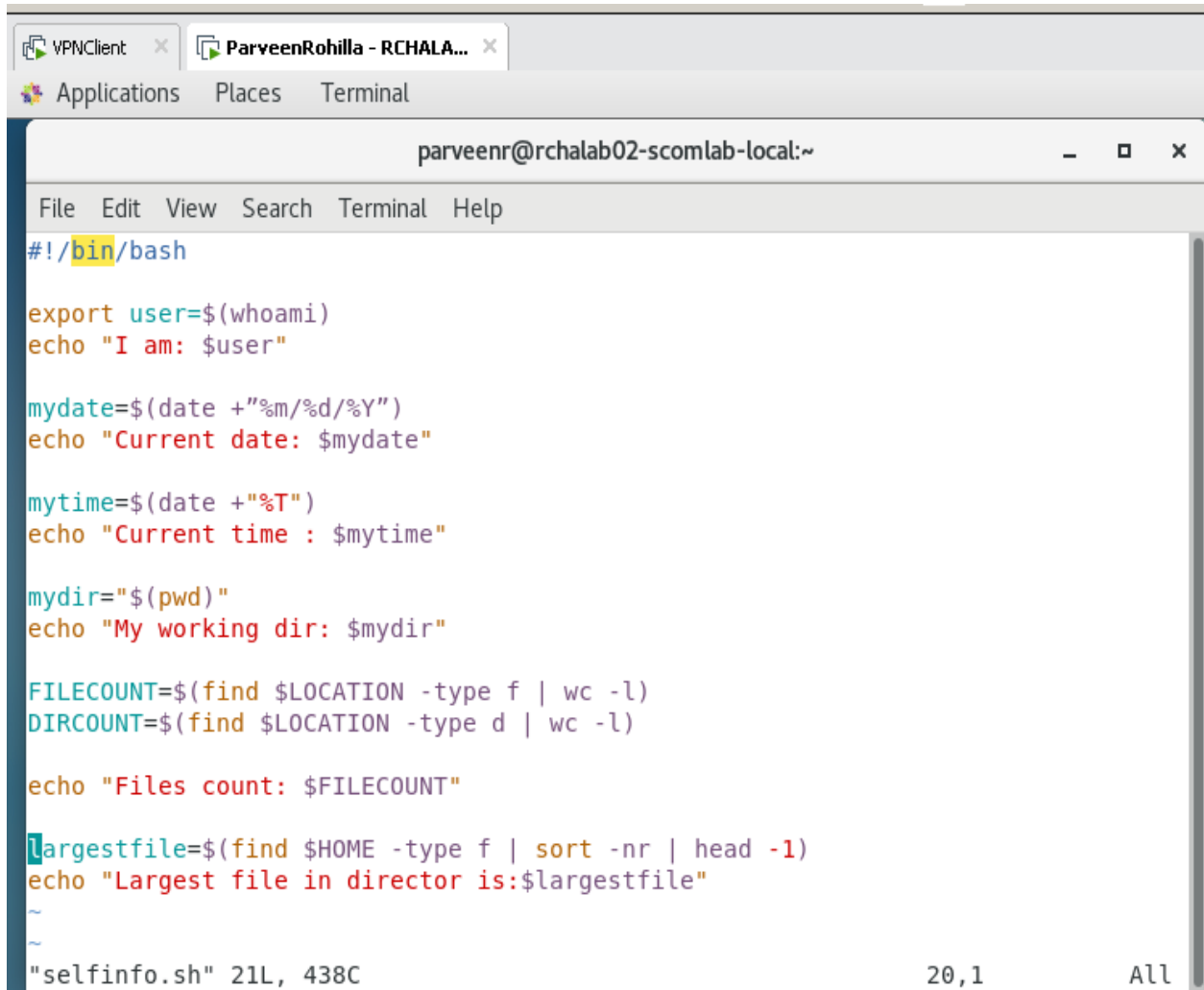
Parveen Kumar Rohilla

Assignment 0

1. Create a simple shell script to tell the user about their session – they need to know:

- What their username is
- What the current date is
- What the time is
- What their current working directory is
- How many files they have in that directory
- What is the biggest file in their current directory

1. Script for above mention question is as:



```
#!/bin/bash

export user=$(whoami)
echo "I am: $user"

mydate=$(date +%m/%d/%Y)
echo "Current date: $mydate"

mytime=$(date +%T)
echo "Current time : $mytime"

mydir="$(pwd)"
echo "My working dir: $mydir"

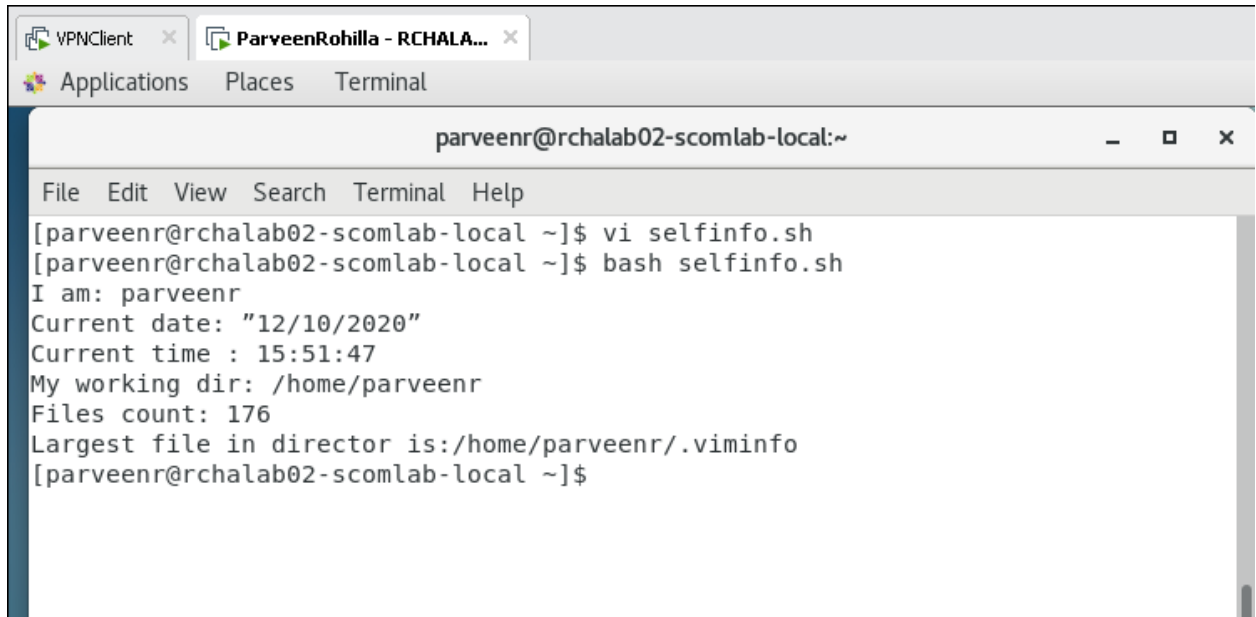
FILECOUNT=$(find $LOCATION -type f | wc -l)
DIRCOUNT=$(find $LOCATION -type d | wc -l)

echo "Files count: $FILECOUNT"

Largestfile=$(find $HOME -type f | sort -nr | head -1)
echo "Largest file in director is:$Largestfile"

~
~
"selfinfo.sh" 21L, 438C 20,1 All
```

2. After execution of script we get the following mention output.

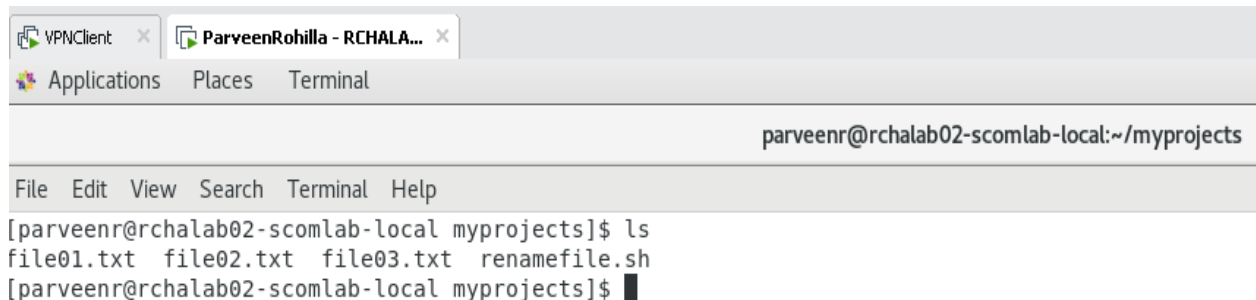


```
parveenr@rchalab02-scomlab-local:~  
File Edit View Search Terminal Help  
[parveenr@rchalab02-scomlab-local ~]$ vi selfinfo.sh  
[parveenr@rchalab02-scomlab-local ~]$ bash selfinfo.sh  
I am: parveenr  
Current date: "12/10/2020"  
Current time : 15:51:47  
My working dir: /home/parveenr  
Files count: 176  
Largest file in director is:/home/parveenr/.viminfo  
[parveenr@rchalab02-scomlab-local ~]$
```

Assignment 1

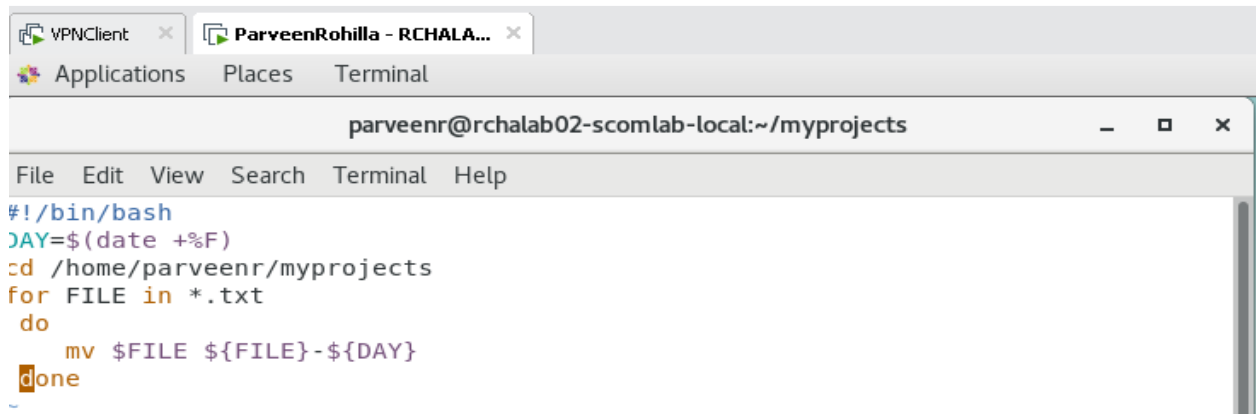
Create a directory with a few test files in it (the files can be empty). Now write a script that for every file in that directory you rename it to have an extension of today's date in YYYYMMDD format.

1. View the current name of files in the directory with ls command.



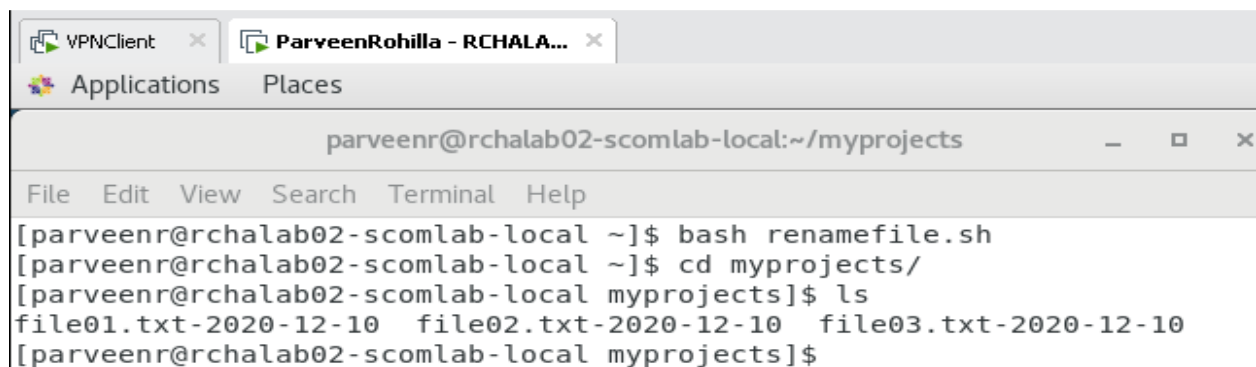
```
parveenr@rchalab02-scomlab-local:~/myprojects  
File Edit View Search Terminal Help  
[parveenr@rchalab02-scomlab-local myprojects]$ ls  
file01.txt file02.txt file03.txt renamefile.sh  
[parveenr@rchalab02-scomlab-local myprojects]$
```

2. Create a script file to rename the file extensions.



```
parveenr@rchalab02-scomlab-local:~/myprojects
File Edit View Search Terminal Help
#!/bin/bash
DAY=$(date +%F)
cd /home/parveenr/myprojects
for FILE in *.txt
do
    mv $FILE ${FILE}-${DAY}
done
```

3. After execution of script, file extension name change with current date.

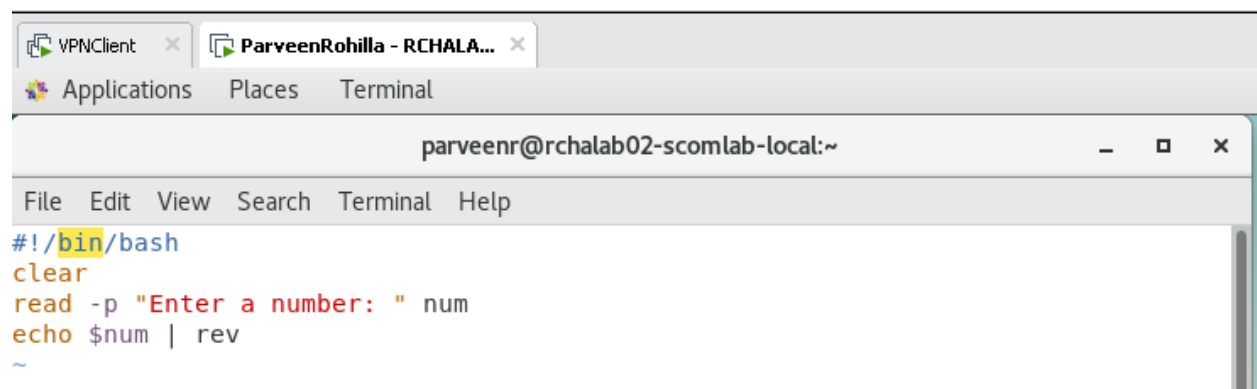


```
parveenr@rchalab02-scomlab-local:~/myprojects
File Edit View Search Terminal Help
[parveenr@rchalab02-scomlab-local ~]$ bash renamefile.sh
[parveenr@rchalab02-scomlab-local ~]$ cd myprojects/
[parveenr@rchalab02-scomlab-local myprojects]$ ls
file01.txt-2020-12-10  file02.txt-2020-12-10  file03.txt-2020-12-10
[parveenr@rchalab02-scomlab-local myprojects]$
```

Assignment 2

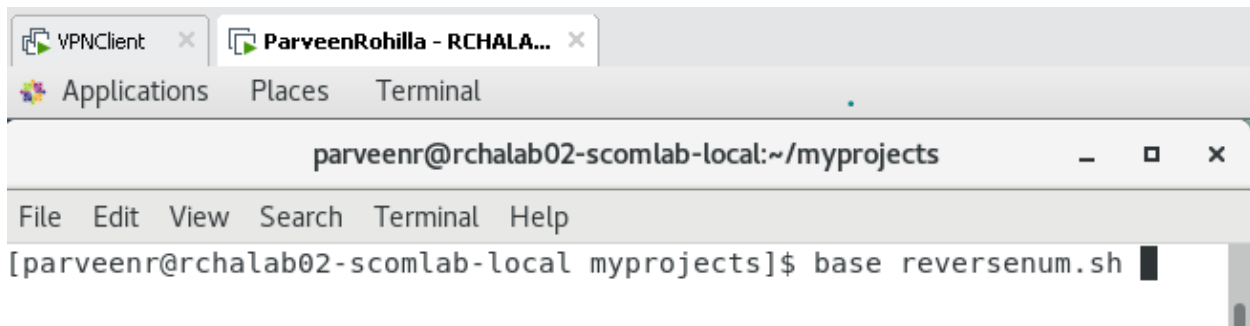
Write a script that takes a number as an input and reverses it out to the user. For example, if the original number is 74985, the output should be 58947.

1. First create a script to reverse the number and name it to reversenum.sh



```
parveenr@rchalab02-scomlab-local:~
File Edit View Search Terminal Help
#!/bin/bash
clear
read -p "Enter a number: " num
echo $num | rev
~
~
```

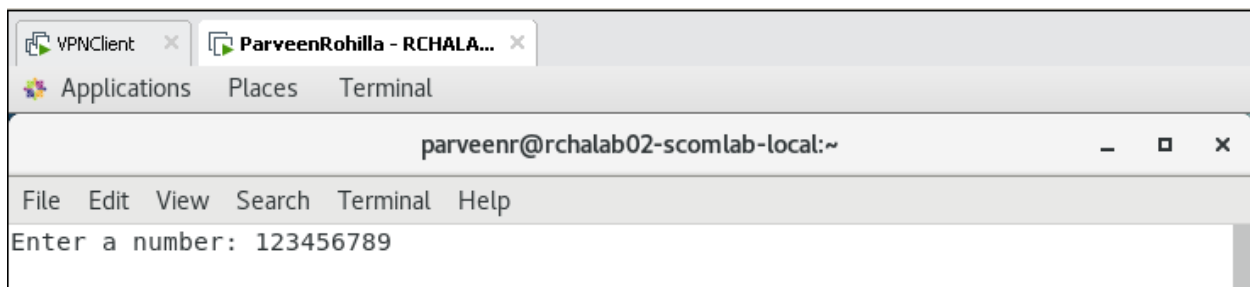
2. Execute the script as mention below.



A terminal window titled "ParveenRohilla - RCHALA..." is open. The prompt is "parveenr@rchalab02-scomlab-local:~/myprojects". The command "base reversenum.sh" has been entered and is waiting for input.

```
parveenr@rchalab02-scomlab-local:~/myprojects
File Edit View Search Terminal Help
[parveenr@rchalab02-scomlab-local myprojects]$ base reversenum.sh
```

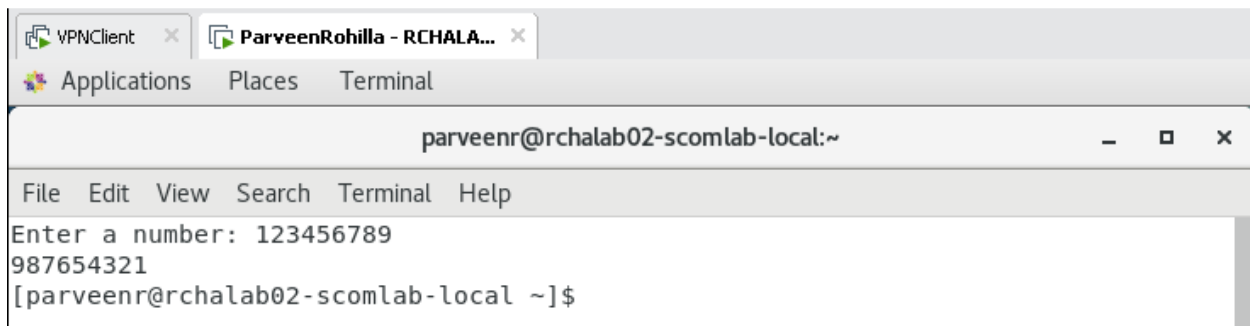
3. Enter the desired number.



The terminal window shows the prompt "parveenr@rchalab02-scomlab-local:~". The command "Enter a number: 123456789" has been entered.

```
parveenr@rchalab02-scomlab-local:~
File Edit View Search Terminal Help
Enter a number: 123456789
```

4. We receive the output in reverse order as shown below.



The terminal window shows the prompt "parveenr@rchalab02-scomlab-local:~". The command "Enter a number: 123456789" has been entered, and the output "987654321" is displayed. The prompt is now "[parveenr@rchalab02-scomlab-local ~]\$".

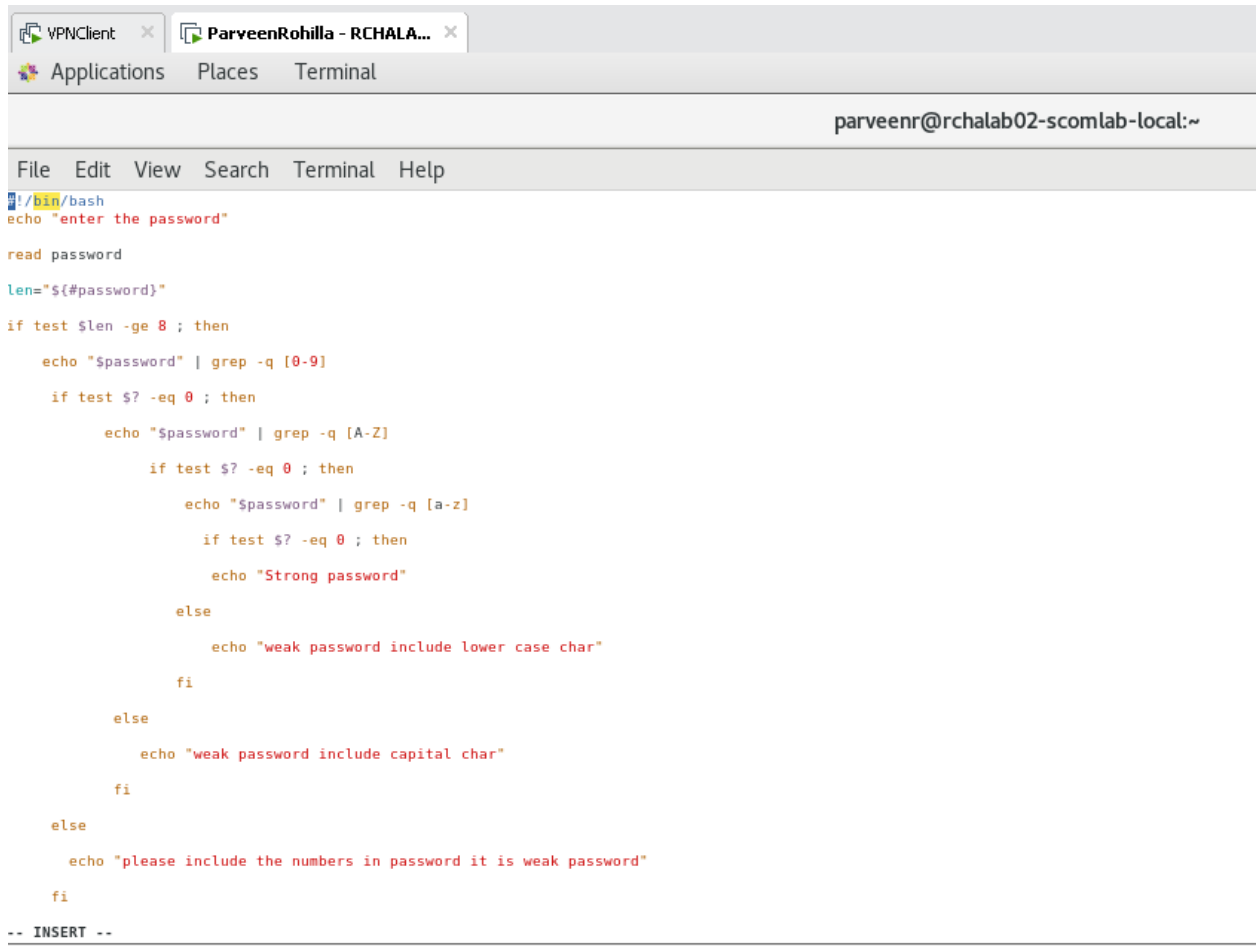
```
parveenr@rchalab02-scomlab-local:~
File Edit View Search Terminal Help
Enter a number: 123456789
987654321
[parveenr@rchalab02-scomlab-local ~]$
```

Assignment 3

Write a script to validate how secure someone's password is. Things you would care about:

- Length should be 8 or more characters
- The password should contain numbers and letters
- There should be both uppercase and lowercase letters

1. Script to solve the above requirement is as:



```
#!/bin/bash
echo "enter the password"

read password

len="${#password}"

if test $len -ge 8 ; then

    echo "$password" | grep -q [0-9]

    if test $? -eq 0 ; then

        echo "$password" | grep -q [A-Z]

        if test $? -eq 0 ; then

            echo "$password" | grep -q [a-z]

            if test $? -eq 0 ; then

                echo "Strong password"

            else

                echo "weak password include lower case char"

            fi

        else

            echo "weak password include capital char"

        fi

    else

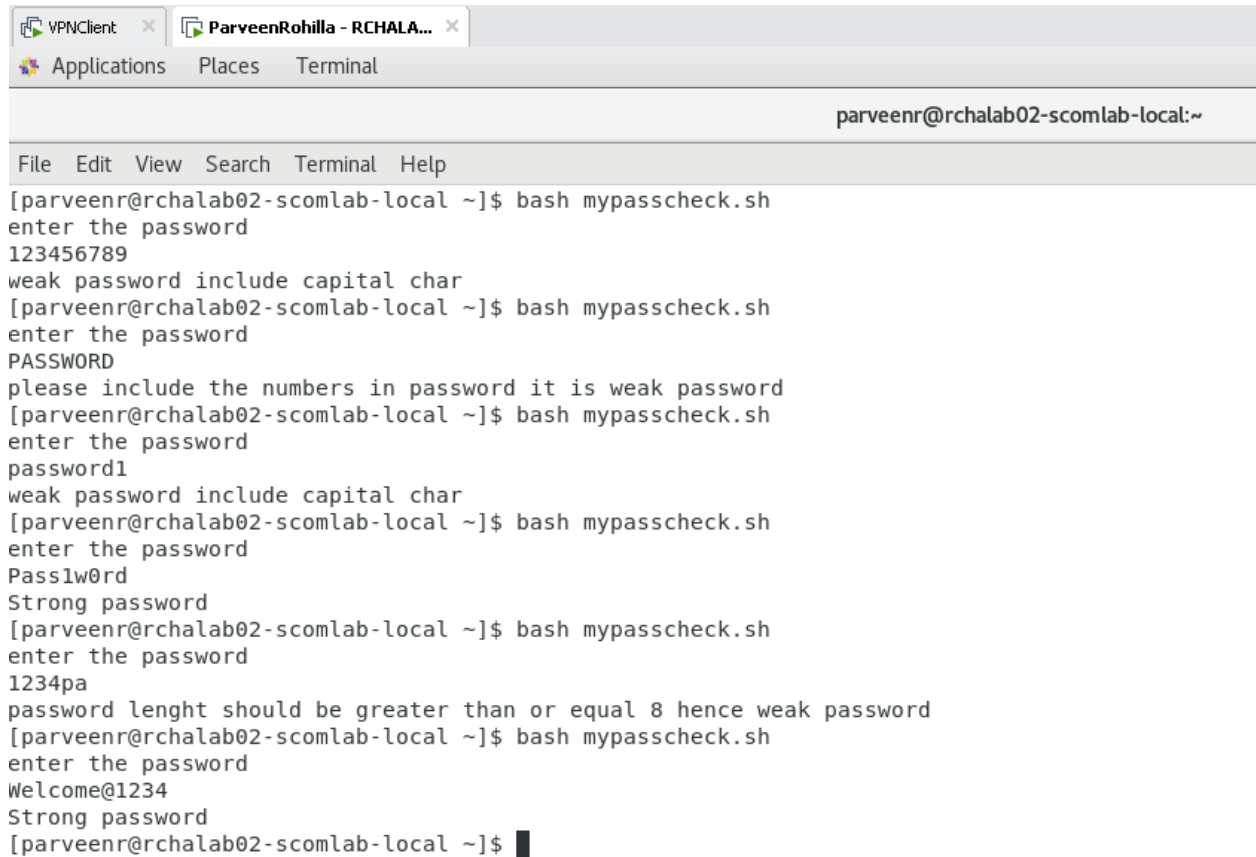
        echo "please include the numbers in password it is weak password"

    fi

fi

-- INSERT --
```

2. Output of the script is as:



The screenshot shows a terminal window titled "ParveenRohilla - RCHALA..." with tabs for "VPNClient", "Applications", "Places", and "Terminal". The terminal displays the following output:

```
[parveenr@rchalab02-scomlab-local ~]$ bash mypasscheck.sh
enter the password
123456789
weak password include capital char
[parveenr@rchalab02-scomlab-local ~]$ bash mypasscheck.sh
enter the password
PASSWORD
please include the numbers in password it is weak password
[parveenr@rchalab02-scomlab-local ~]$ bash mypasscheck.sh
enter the password
password1
weak password include capital char
[parveenr@rchalab02-scomlab-local ~]$ bash mypasscheck.sh
enter the password
Pass1w0rd
Strong password
[parveenr@rchalab02-scomlab-local ~]$ bash mypasscheck.sh
enter the password
1234pa
password lenght should be greater than or equal 8 hence weak password
[parveenr@rchalab02-scomlab-local ~]$ bash mypasscheck.sh
enter the password
Welcome@1234
Strong password
[parveenr@rchalab02-scomlab-local ~]$
```