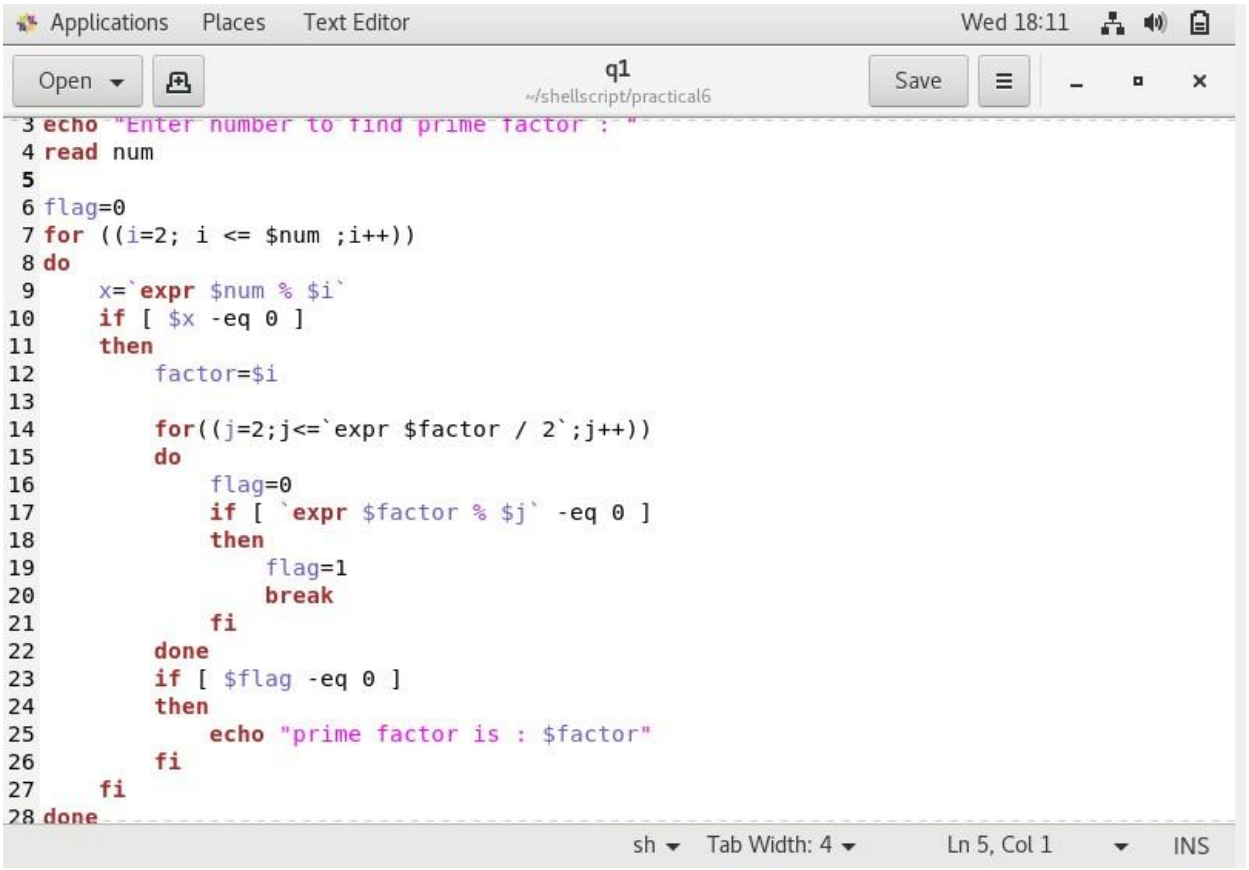
Practical 6

1. Write a shell script, which finds the prime factors of a given number.

Program:

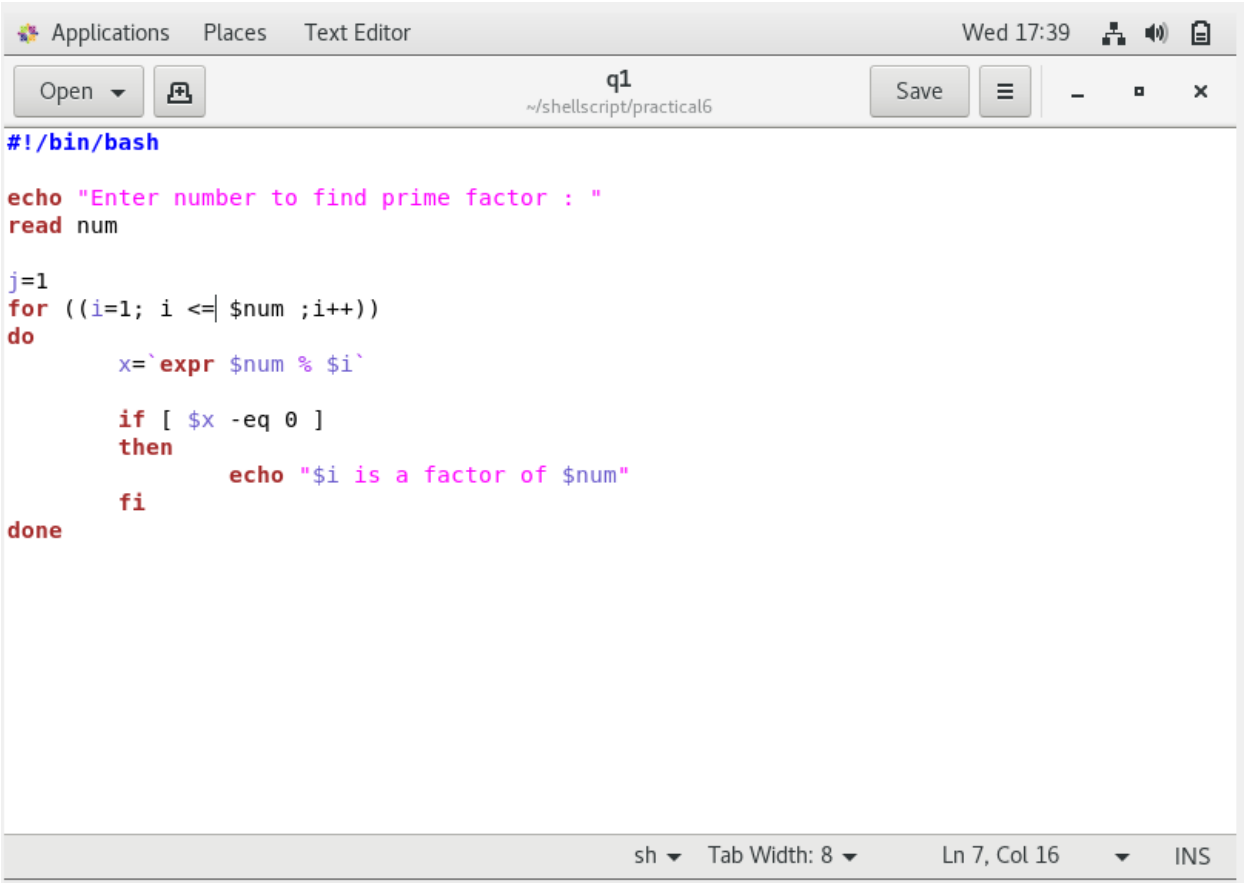


Output:

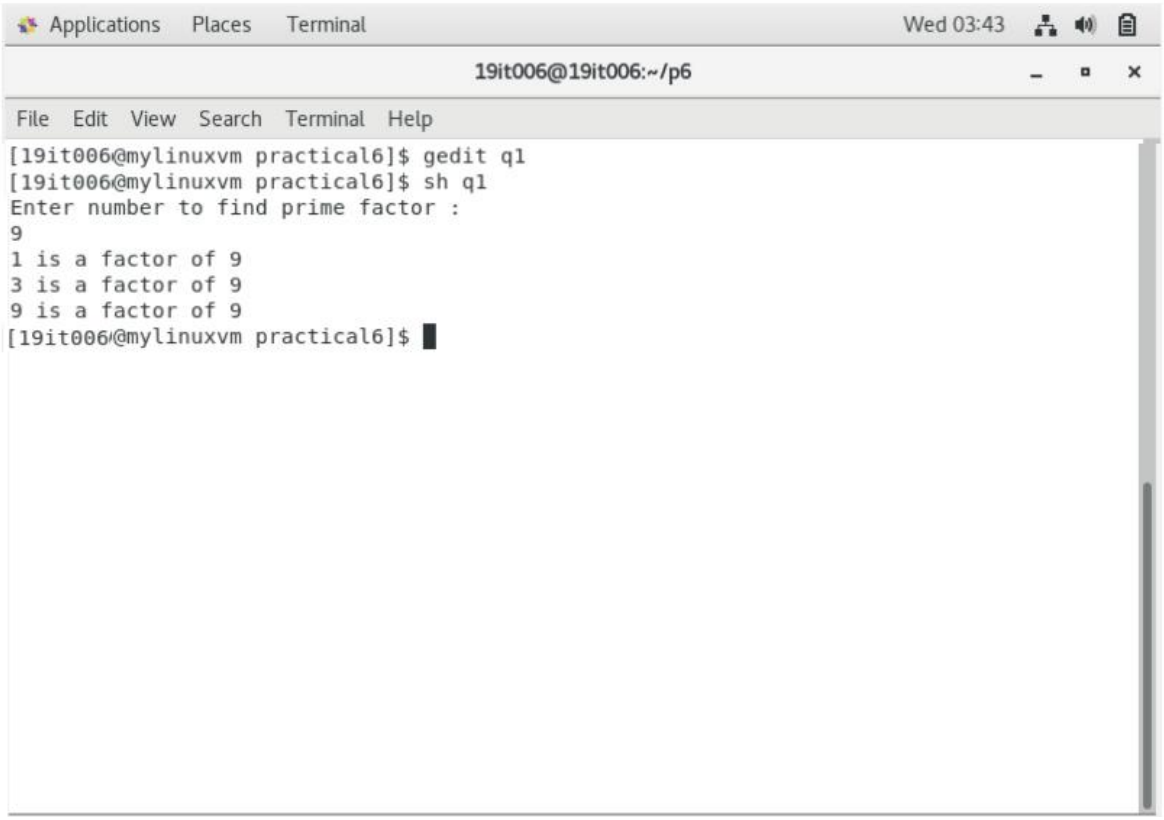

Applications Places Terminal
Wed 03:43
19it006@19it006:~/p6
File Edit View Search Terminal Help
[19it006@mylinuxvm practical6]$ gedit q1
[19it006@mylinuxvm practical6]$ sh q1
Enter number to find prime factor :
12
prime factor is : 2
prime factor is : 3
[19it006@mylinuxvm practical6]$

2. Write a shell script that accepts a positive integer value from the user, say 34, and prints out all the divisors of 34 as a list:Enter a positive integer:34The divisors of 34 are: 1, 2, 17, and 34.

Program:

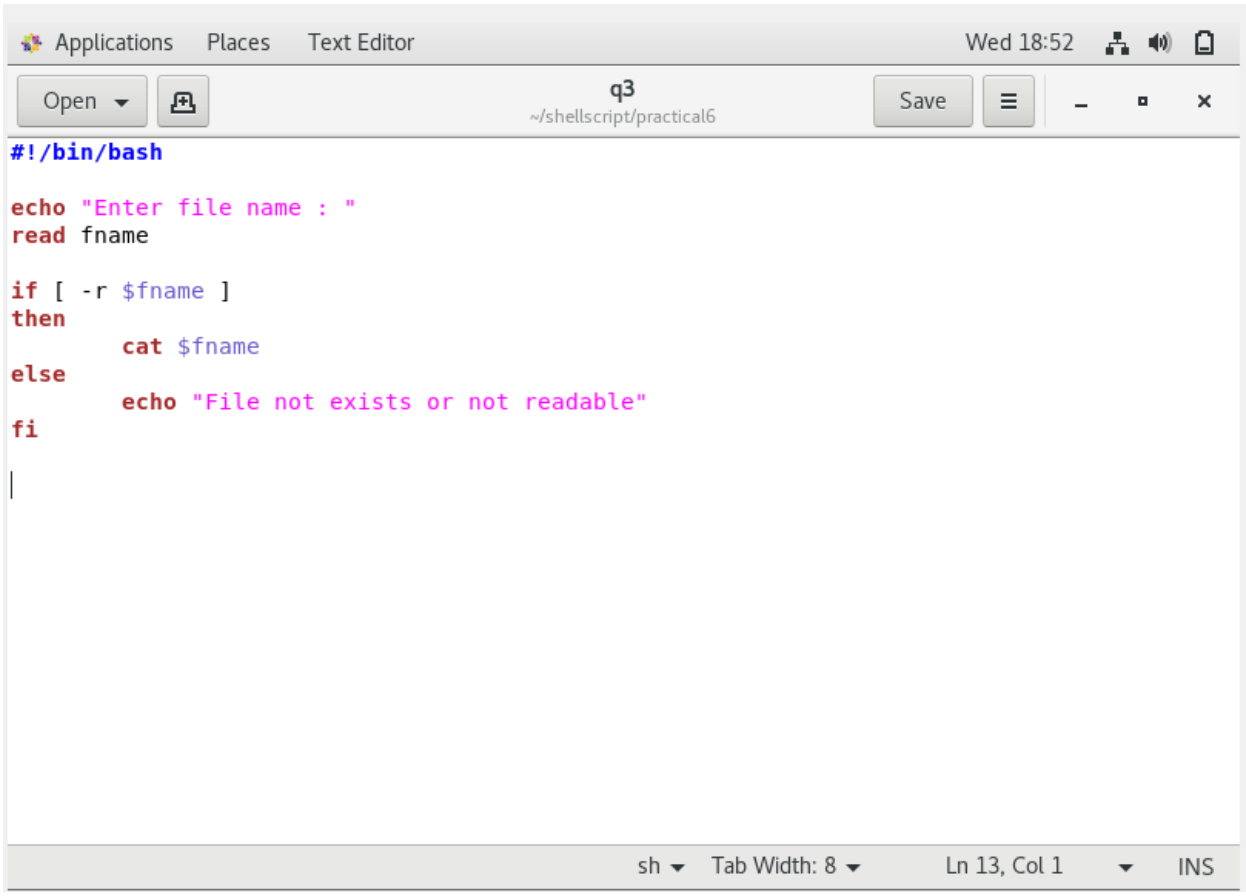


Output:

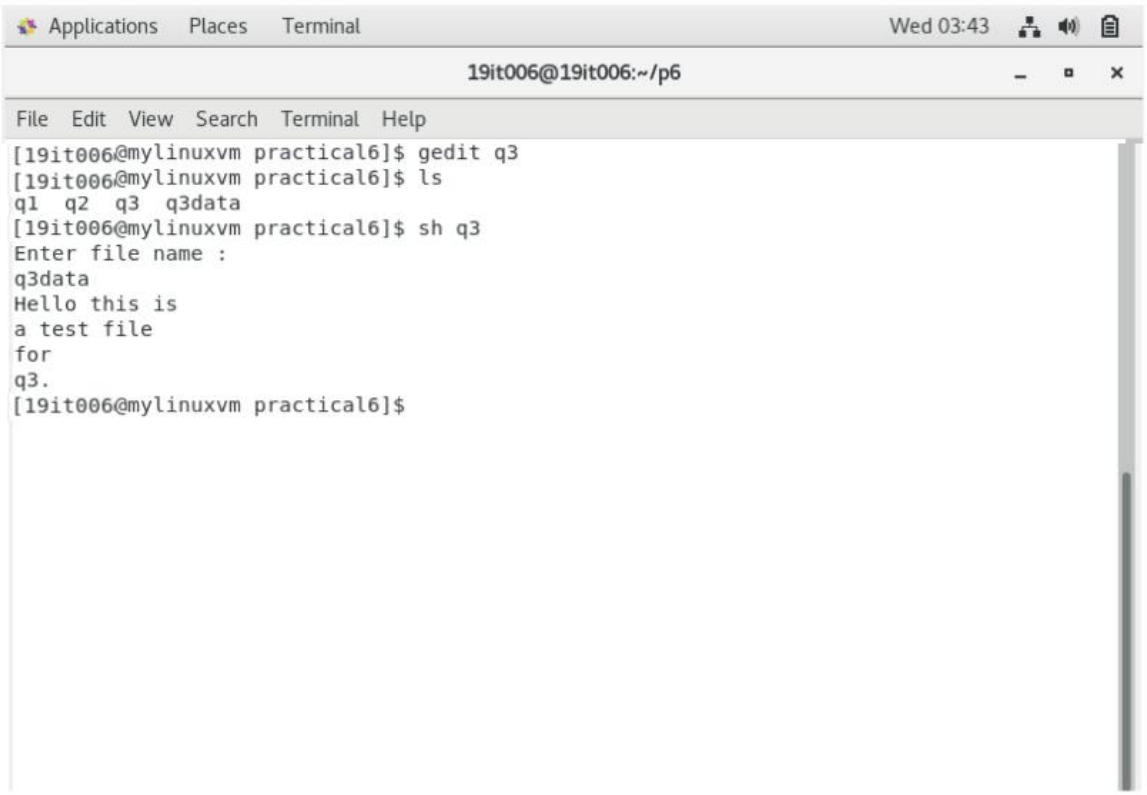


3. Check whether a given file is readable or not. If it is readable, then display the file contents.

Program:

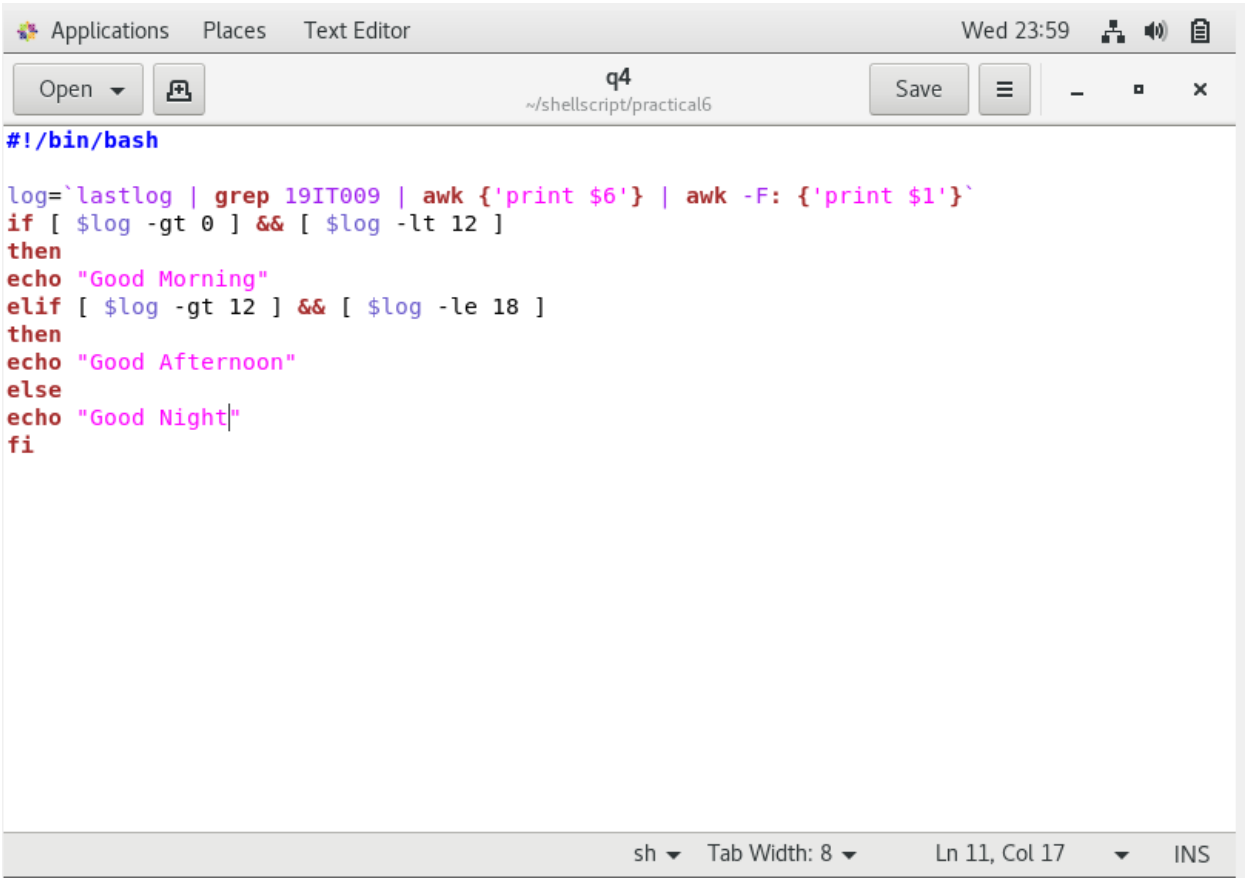

Applications
Places
Text Editor
Wed 18:52
Open
q3
~/shellscript/practical6
Save
#!/bin/bash
echo "Enter file name : "
read fname
if [-r $fname]
then
cat $fname
else
echo "File not exists or not readable"
fi
sh
Tab Width: 8
Ln 13, Col 1
INS

Output:


Applications Places Terminal
Wed 03:43
19it006@19it006:~/p6
File Edit View Search Terminal Help
[19it006@mylinuxvm practical6]$ gedit q3
[19it006@mylinuxvm practical6]$ ls
q1 q2 q3 q3data
[19it006@mylinuxvm practical6]$ sh q3
Enter file name :
q3data
Hello this is
a test file
for
q3.
[19it006@mylinuxvm practical6]$

4. Display a message “Good Morning” or “Good Afternoon” according to the user login time.

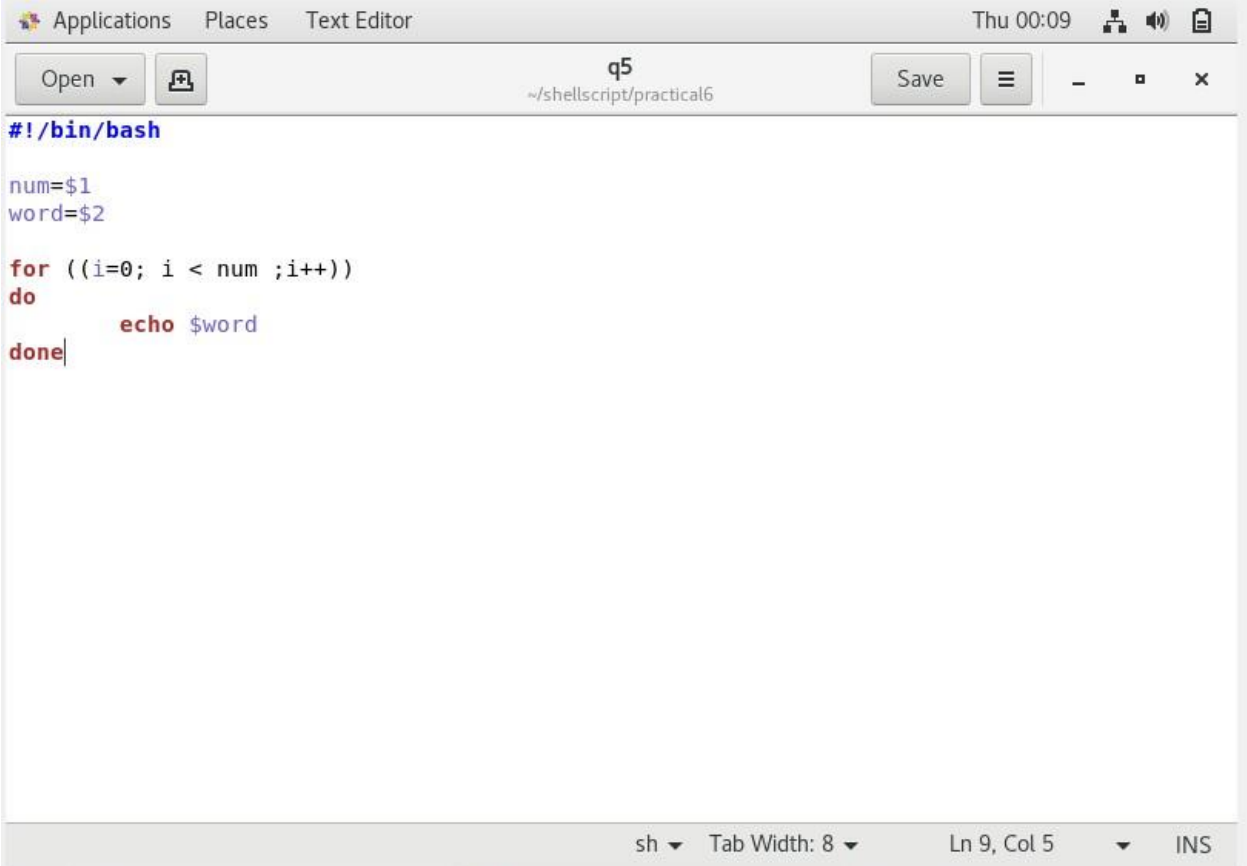
Program:



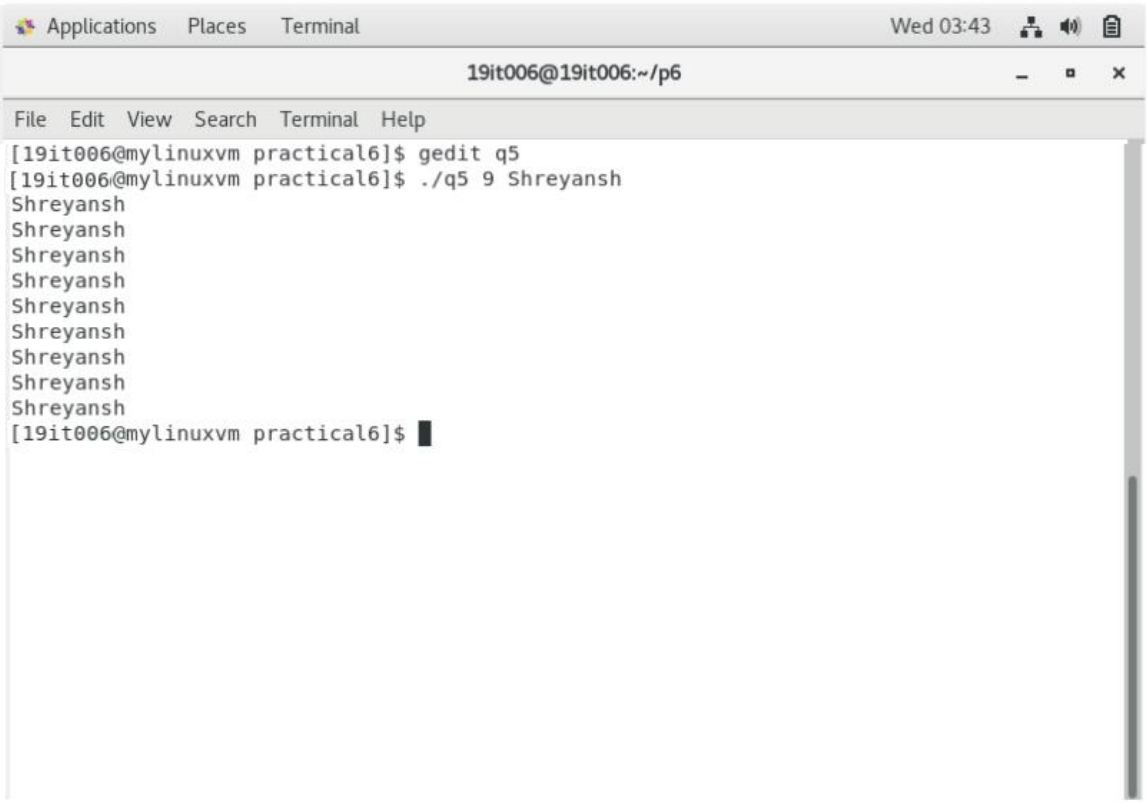
Output:

5. A shell script, which takes as command line input a number n, and a word. It then prints the word n times, once on each line.

Program:


Applications
Places
Text Editor
Thu 00:09
Open
q5
~/shellscript/practical6
Save
#!/bin/bash
num=$1
word=$2
for ((i=0; i < num ;i++))
do
echo $word
done
sh
Tab Width: 8
Ln 9, Col 5
INS

Output:



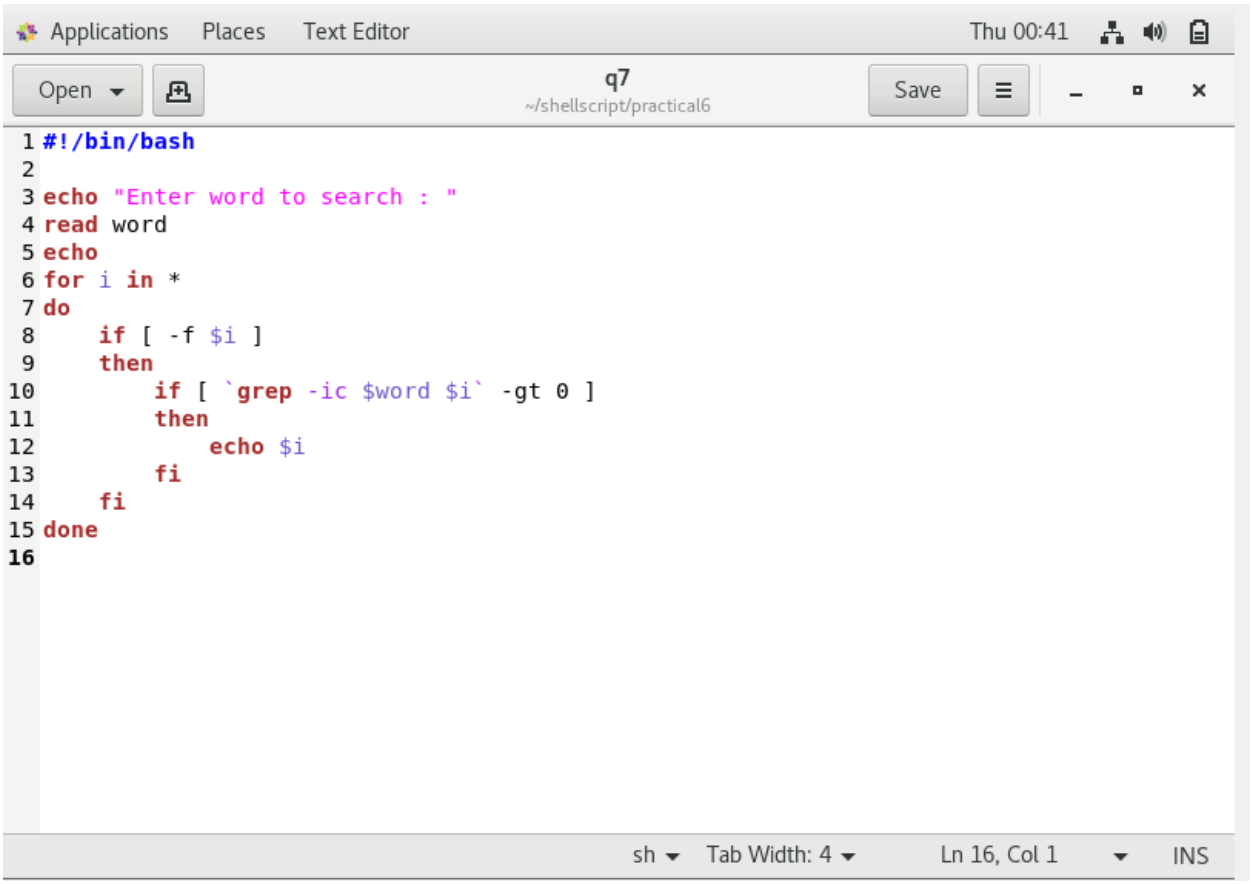
6. **A shell script, which reports the names and sizes of all the files in a directory whose size exceeds 1000 bytes, in descending order of their sizes and the total number of such files.**

Program:

Output:

7. **Write a script that will search for a specific word in all the files in the current directoryand then prompt with the file name in which word is found.**

Program:


Applications
Places
Text Editor
Thu 00:41
Open
q7
~/shellscript/practical6
Save
#!/bin/bash
echo "Enter word to search : "
read word
echo
for i in *
do
if [-f $i]
then
if [`grep -ic $word $i` -gt 0]
then
echo $i
fi
fi
done
sh
Tab Width: 4
Ln 16, Col 1
INS

Output:

8. Write a script to print only the number of executable files in each sub-dir of the argument directory specified.

Program:

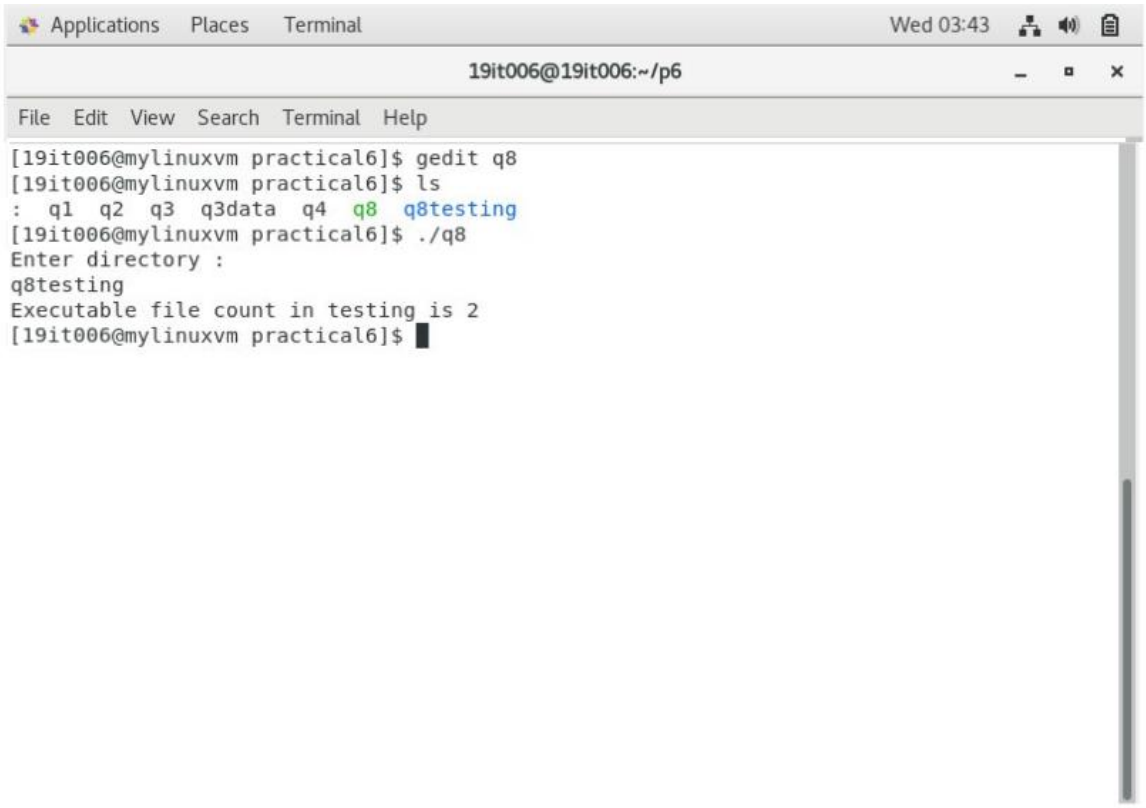
Applications Places Text Editor Thu 01:15

Open q8 ~/shellscript/practical6 Save

```
#!/bin/bash

echo "Enter directory : "
read di
cd $di
cnt=0

for i in *
do
    if [ -d $i ]
    then
        cd $i
        for file in *
        do
            if [ -f $file ] && [ -x $file ]
            then
                cnt=$((cnt+1))
            fi
        done
    echo "Executable file count in $i is $cnt"
    cd ..
    fi
done

```

sh Tab Width: 4 Ln 24, Col 1 INS

Output:



9. Write a shell script file named exercise6.sh that makes a list of files in your home directory that were changed less than 24 hours ago, but leave out directories.

Program:

Output:

10. Write a shell script which will take file name as argument and check whether the file name is a dir or not and then proceed further only if it is a dir, else give usage message. The script should then print in the tabular format, name of each sub-dir (within the argument dir) and a count of the number of top-level files in that sub-dir.

Program:

Output: