

# **ShellScriptingAssignment Answers**

## **Assignment1)**

hp@DESKTOP-TNUADJRMINGW64/c/assignmentAnswers

\$ vi ass1.sh

## **Shellscriptcode:-**

if[-f"myfile.txt"]

then

echo"found"

else

echo"notfound"fi

## **endofshellscriptcode**

hp@DESKTOP-TNUADJRMINGW64/c/assignmentAnswers

\$ ls

ass1.shgitAssignment\_abhijithsai.pdfmyfile.txtmysql\_abhijithsai.docx

hp@DESKTOP-TNUADJR MINGW64 /c/assignmentAnswers

\$shass1.sh

found

hp@DESKTOP-TNUADJRMINGW64/c/assignmentAnswers

\$rmmyfile.txt

hp@DESKTOP-TNUADJRMINGW64/c/assignmentAnswers

\$ ls

ass1.shgitAssignment\_abhijithsai.pdfmysql\_abhijithsai.docx

hp@DESKTOP-TNUADJR MINGW64 /c/assignmentAnswers

\$shass1.sh

not found

```
hp@DESKTOP-TNUAD3R MINGW64 /c/assignmentAnswers
$ vi ass1.sh

hp@DESKTOP-TNUAD3R MINGW64 /c/assignmentAnswers
$ ls
ass1.sh  gitAssignment_abhijithsai.pdf  myfile.txt  mySQL_abhijithsai.docx

hp@DESKTOP-TNUAD3R MINGW64 /c/assignmentAnswers
$ sh ass1.sh
found

hp@DESKTOP-TNUAD3R MINGW64 /c/assignmentAnswers
$ rm myfile.txt

hp@DESKTOP-TNUAD3R MINGW64 /c/assignmentAnswers
$ ls
ass1.sh  gitAssignment_abhijithsai.pdf  mySQL_abhijithsai.docx

hp@DESKTOP-TNUAD3R MINGW64 /c/assignmentAnswers
$ sh ass1.sh
not found

hp@DESKTOP-TNUAD3R MINGW64 /c/assignmentAnswers
$
```

```
if [ -f "myfile.txt" ]
then
echo "found"
else
echo "not found"
```

```
ass1.sh [unix] (23:01 01/05/2025)
```

## **Assignment2)**

hp@DESKTOP-TNUADJRMINGW64/c/assignmentAnswers

\$vi evenOrOdd.sh

### **Shellscript :-**

```
whileecho"enternumber"d
o
    readnum1
    if[$num1-eq0] then
        exit
    else
        rem=$((num1%2))
        if [ $rem -eq 0 ]
        then
            echo"even"
        else
            echo"odd"
        fi
    fi
done
```

### **Shellscript end**

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64 /c/assignmentAnswers

\$shevenOrOdd.sh

enter number

10

even

enternumber

20

\$

[illegible]

### Assignment3)

hp@DESKTOP-TNUADJRMINGW64/c/assignmentAnswers

\$viprintNoOfLines.sh

### Shellscript):

wc-l \$1

### endofshellscript

hp@DESKTOP-TNUADJRMINGW64/c/assignmentAnswers

\$ ls

'~\$SQL\_abhijithsai.docx'ass1.sh gitAssignment\_abhijithsai.pdfmySQL\_abhijithsai.docx

'~WRL2752.tmp' evenOrOdd.shhello.txt printNoOfLines.sh

hp@DESKTOP-TNUADJR MINGW64 /c/assignmentAnswers

\$ cat hello.txt

helloabhijithsai

goodmorninghaveaniceday

hp@DESKTOP-TNUADJRMINGW64/c/assignmentAnswers

\$shprintNoOfLines.shhello.txt 2

hello.txt

hp@DESKTOP-TNUADJRMINGW64/c/assignmentAnswers

\$cat>newFile.txt a

b

c

d

e

[1]+Stopped cat>newFile.txt

hp@DESKTOP-TNUADJRMINGW64/c/assignmentAnswers

\$shprintNoOfLines.shnewFile.txt 5

newFile.txt

The image shows a Windows desktop environment. A terminal window is open, displaying a multi-tabbed shell with the title bar 'Select MINGW64/c/assignmentAnswers'. The terminal has several tabs, with the active one showing the prompt 'hp@DESKTOP-TNUAD3R MINGW64 /c/assignmentAnswers'. The user has executed several commands: 'vi printNoOfLines.sh', 'ls', 'cat hello.txt', 'sh printNoOfLines.sh hello.txt', 'cat > newFile.txt', and 'sh printNoOfLines.sh newFile.txt'. The output of the 'cat' command shows 'hello abhijith sai' and 'good morning have a nice day'. The 'sh printNoOfLines.sh' command outputs '2 hello.txt'. The 'cat > newFile.txt' command creates a new file, and the 'sh printNoOfLines.sh newFile.txt' command outputs '1'. The terminal window is positioned over a Windows taskbar at the bottom, which includes the Start button, a search bar, and several application icons (File Explorer, Edge, Chrome, etc.).

#### **Assignment4 ):**

```
hp@DESKTOP-TNUADJR MINGW64 /c/shellScripting Practice
$ vi createFiles.sh
```

#### **Shell code )**

```
mkdir dir
for((i=0;i<=10;i++))
do
    filename=dir/File$i.txt
    echo "file$i.txt" > $filename
done
```

#### **end**

```
hp@DESKTOP-TNUADJR MINGW64 /c/shellScripting Practice
$ ls
add.sh createFiles.sh date.sh hi.sh
```

```
hp@DESKTOP-TNUADJR MINGW64 /c/shellScripting Practice
$ sh createFiles.sh
```

```
hp@DESKTOP-TNUADJR MINGW64 /c/shellScripting Practice
$ ls
add.sh createFiles.sh date.sh dir/ hi.sh
```

```
hp@DESKTOP-TNUADJR MINGW64 /c/shellScripting Practice
$ cd /dir/
bash: cd: /dir/: No such file or directory
```

```
hp@DESKTOP-TNUADJR MINGW64 /c/shellScripting Practice
$ cd ./dir
```

```
hp@DESKTOP-TNUADJR MINGW64 /c/shellScripting Practice/dir
$ ls
File0.txt File10.txt File3.txt File5.txt File7.txt File9.txt
File1.txt File2.txt File4.txt File6.txt File8.txt
```

```
hp@DESKTOP-TNUADJR MINGW64 /c/shellScripting Practice/dir
$ cat file1.txt
file1.txt
```

```
RP@DESKTOP-TNUADJR MINGW64 /c/shellScripting Practice/dir
$ vi createFiles.sh

RP@DESKTOP-TNUADJR MINGW64 /c/shellScripting Practice
$ sh createFiles.sh


RP@DESKTOP-TNUADJR MINGW64 /c/shellScripting Practice
$ ls
add.sh createFiles.sh date.sh dir/ hi.sh

RP@DESKTOP-TNUADJR MINGW64 /c/shellScripting Practice
$ cd ./dir

RP@DESKTOP-TNUADJR MINGW64 /c/shellScripting Practice/dir
$ ls
File0.txt File1.txt File10.txt File2.txt File3.txt File4.txt File5.txt File6.txt File7.txt File8.txt File9.txt

RP@DESKTOP-TNUADJR MINGW64 /c/shellScripting Practice/dir
$ cat File0.txt
File0.txt

RP@DESKTOP-TNUADJR MINGW64 /c/shellScripting Practice/dir
$
```

The screenshot shows the bottom portion of the terminal window, which is partially obscured by the Windows taskbar. The taskbar includes the Start button on the left, followed by a search bar with the placeholder text "Type here to search". To the right of the search bar are several pinned application icons, including the Task View icon, File Explorer, Edge browser, and others. The terminal window's title bar at the very top indicates the current directory as "MINGW64/c/shellScripting Practice/dir".

```
mkdir dir
for((i=0;i<=10;i++))
do
    filename=dir/File$i.txt
    echo "File$i.txt" > $filename
done
```



### Assignment5)

hp@DESKTOP-TNUADJRMINGW64/c/assignmentAnswers

\$viass3.sh

### ShellScriptcode:-

```
if["$1"=="--debug"] then
    DEBUG=true
else
    DEBUG=false
fi
DIR="newdir"
FILE="text.txt"deb
ug() {
    if["$DEBUG"=true] then
        echo"[DEBUG] $1"
    fi
}
debug"creatingadir$DIR" mkdir
"$DIR" 2>/dev/null

if[-d"$DIR"]
thenecho"DIRisready"else
    echo"Error:cantcreatedir" exit
    1
fi
debug"Creatingfile$FILEin$DIR" touch
"$DIR/$FILE" 2>/dev/null
```

```
if [ -f "$DIR/$FILE" ]
then echo "file created." else
echo "not create" exit
fi
1
fi
debug "Script finished successfully"
```

### **End of shell script**

```
hp@DESKTOP-TNUADJRMINGW64/c/assignmentAnswers
$ sh ass3.sh
DIR is ready
file created.
hp@DESKTOP-TNUADJRMINGW64/c/assignmentAnswers
$ sh ass3.sh --debug
[DEBUG] creating a dir newdir
DIR is ready
[DEBUG] Creating file text.txt in newdir
file created.
[DEBUG] Script finished successfully
```



## Assignment6)

hp@DESKTOP-TNUADJRMINGW64/c/assignmentAnswers

\$catlogFile.txt

2025-04-30 10:15:32 INFO	SystemCheck	Starting system check...
2025-04-30 10:16:00 ERROR	Database	Failed to connect to database
2025-04-30 10:16:45 WARN	Storage	Low disk space on server
2025-04-30 10:17:01 INFO	SystemCheck	System check completed
2025-04-30 10:18:12 ERROR	Auth	User authentication failed
2025-04-30 10:19:22 INFO	Scheduler	Scheduled job started
2025-04-30 10:20:05 ERROR	Config	Unable to read configuration file

hp@DESKTOP-TNUADJRMINGW64/c/assignmentAnswers

\$grep "ERROR" logFile.txt | awk '{print \$1\$2\$3}' 2025

-04-30 10:16:00 ERROR

2025-04-30 10:18:12 ERROR

2025-04-30 10:20:05 ERROR

hp@DESKTOP-TNUADJRMINGW64/c/assignmentAnswers

\$

```
MINGW64/c/assignmentAnswers
hp@DESKTOP-TNUADJR MINGW64 /c/assignmentAnswers
$ cat logfile.txt
2025-04-30 10:15:32 INFO      SystemCheck      Starting system check...
2025-04-30 10:16:00 ERROR    Database         Failed to connect to database
2025-04-30 10:16:45 WARN    Storage         Low disk space on server
2025-04-30 10:17:01 INFO    SystemCheck      System check completed
2025-04-30 10:18:12 ERROR    Auth            User authentication failed
2025-04-30 10:19:22 INFO    Scheduler       Scheduled job started
2025-04-30 10:20:05 ERROR    Config          Unable to read configuration file
hp@DESKTOP-TNUADJR MINGW64 /c/assignmentAnswers
$ gerp "ERROR" logfile.txt | awk '{print $1 $2 $3}'
bash: gerp: command not found
hp@DESKTOP-TNUADJR MINGW64 /c/assignmentAnswers
$ grep "ERROR" logfile.txt | awk '{print $1 $2 $3}'
2025-04-3010:16:00ERROR
2025-04-3010:18:12ERROR
2025-04-3010:20:05ERROR
hp@DESKTOP-TNUADJR MINGW64 /c/assignmentAnswers
$ _
```

## Assignment7)

```
hp@DESKTOP-TNUADJRMINGW64/c/assignmentAnswers
```

```
$cattextFile.txt
```

```
Thisistheold_textthatwewanttoreplace.
```

```
Sometimesold_textappearsmultipletimes:old_textold_text!
```

```
Make sure all instances of old_text are replaced.
```

```
This line has no keyword.
```

```
old_textatthestartofaline.
```

```
Attheendofalineweseeoold_text.
```

```
hp@DESKTOP-TNUADJRMINGW64/c/assignmentAnswers
```

```
$ sed 's/old_text/new_text/' textFile.txt > res.txt
```

```
hp@DESKTOP-TNUADJRMINGW64/c/assignmentAnswers
```

```
$catres.txt
```

```
Thisisthenew_textthatwewanttoreplace.
```

```
Sometimesnew_textappearsmultipletimes:old_textold_text!
```

```
Make sure all instances of new_text are replaced.
```

```
This line has no keyword.
```

```
new_textatthestartofaline.
```

```
Attheendofalineweseenew_text.
```

```
hp@DESKTOP-TNUADJRMINGW64/c/assignmentAnswers
```

```
$ sed 's/old_text/new_text/g' textFile.txt > res.txt
```

```
hp@DESKTOP-TNUADJRMINGW64/c/assignmentAnswers
```

```
$catres.txt
```

```
Thisisthenew_textthatwewanttoreplace.
```

```
Sometimesnew_textappearsmultipletimes:new_textnew_text! Make
```

```
sure all instances of new_text are replaced.
```

```
This line has no keyword.
```

```
new_textatthestartofaline.
```

```
Attheendofalineweseenew_text.
```

hp@DESKTOP-TNUADJRMINGW64/c/assignmentAnswers

\$

```
MINGW64/c/assignmentAnswers
hp@DESKTOP-TNUADJR MINGW64 /c/assignmentAnswers
$ cat textFile.txt
This is the old_text that we want to replace.
Sometimes old_text appears multiple times: old_text old_text!
Make sure all instances of old_text are replaced.
This line has no keyword.
old_text at the start of a line.
At the end of a line we see old_text.
hp@DESKTOP-TNUADJR MINGW64 /c/assignmentAnswers
$ sed 's/old_text/new_text/' textFile.txt > res.txt

hp@DESKTOP-TNUADJR MINGW64 /c/assignmentAnswers
$ cat res.txt
This is the new_text that we want to replace.
Sometimes new_text appears multiple times: old_text old_text!
Make sure all instances of new_text are replaced.
This line has no keyword.
new_text at the start of a line.
At the end of a line we see new_text.
hp@DESKTOP-TNUADJR MINGW64 /c/assignmentAnswers
$ sed 's/old_text/new_text/g' textFile.txt > res.txt

hp@DESKTOP-TNUADJR MINGW64 /c/assignmentAnswers
$ cat res.txt
This is the new_text that we want to replace.
Sometimes new_text appears multiple times: new_text new_text!
Make sure all instances of new_text are replaced.
This line has no keyword.
new_text at the start of a line.
At the end of a line we see new_text.
hp@DESKTOP-TNUADJR MINGW64 /c/assignmentAnswers
$
```