

1. Write a Unix Shell Script which prints the following
 - a. Current home directory.
 - b. Current user name.
 - c. The message "No of users logged in : " with total no of current logged in users.

```
bibek@bibek-H310M-H-2-0:~/Linux_Practical/Class_5$ cat shellprogram.sh
#!/bin/bash

echo "The current working directory is: "; pwd # prints the current working directory

echo "The current user: "; whoami #prints the current user

echo "Total number of users logged in is/are: "; who -w | cut -d ' ' -f 1 > temp.txt | wc -l temp.txt
bibek@bibek-H310M-H-2-0:~/Linux_Practical/Class_5$ bash shellprogram.sh
The current working directory is:
/home/bibek/Linux_Practical/Class_5
The current user:
bibek
Total number of users logged in is/are:
1 temp.txt
bibek@bibek-H310M-H-2-0:~/Linux_Practical/Class_5$ bash shellprogram.sh
The current working directory is:
/home/bibek/Linux_Practical/Class_5
The current user:
bibek
Total number of users logged in is/are:
4 temp.txt
bibek@bibek-H310M-H-2-0:~/Linux_Practical/Class_5$ who -w
bibek    ? :0          2020-10-06 13:35 (:0)
chinky   ? :2          2020-10-06 14:06 (:2)
sam      ? :3          2020-10-06 14:06 (:3)
student  ? :4          2020-10-06 14:07 (:4)
bibek@bibek-H310M-H-2-0:~/Linux_Practical/Class_5$
```

2. Write shell script to accept marks of of Unix, VB.Net,PHP and calculate the average of marks and display the message as follow :

if Average then display - is 70 or above "Distinction"

is 60 <= 70 "First Class"

- is 50 <= 60 "Second Class"

- is 40 <= 50 "Third Class"

- otherwise "Fail"

```
bibek@bibek-H310M-H-2-0:~/Linux_Practical/Class_5$ cat report.sh
#!/ bin/bash

#variable declaration
unix=0
vbnet=0
php=0
total=0
avg=0

#to get i/p from users for marks in different sub
read -p "Please enter your marks in Unix: " unix
read -p "Please enter your marks in VB.NET: " vbnet
read -p "Please enter your marks in PHP: " php

total=`echo $unix+$vbnet+$php | bc` # calculating total of 3 subjects
avg=`echo $total/3 | bc` #calculating the average

echo "Your total is: $total"
echo "Your percentage is: $avg"

#assinging the rank as per percentage
if [ $avg -gt 70 ];
then echo "Distinction"
elif [ [ $avg -gt 60 ] && [ $avg -le 70 ] ];
then echo "First Class"
elif [ [ $avg -gt 50 ] && [ $avg -le 60 ] ];
then echo "Second Class"
elif [ [ $avg -gt 40 ] && [ $avg -le 50 ] ];
then echo "Third Class"
else
echo "Fail"
fi
bibek@bibek-H310M-H-2-0:~/Linux_Practical/Class_5$
```

```
bibek@bibek-H310M-H-2-0:~/Linux_Practical/Class_5$ bash report.sh
Please enter your marks in Unix: 78
Please enter your marks in VB.NET: 84
Please enter your marks in PHP: 94
Your total is: 256
Your percentage is: 85
Distinction
bibek@bibek-H310M-H-2-0:~/Linux_Practical/Class_5$ bash report.sh
Please enter your marks in Unix: 67
Please enter your marks in VB.NET: 53
Please enter your marks in PHP: 70
Your total is: 190
Your percentage is: 63
First Class
bibek@bibek-H310M-H-2-0:~/Linux_Practical/Class_5$ bash report.sh
Please enter your marks in Unix: 69
Please enter your marks in VB.NET: 51
Please enter your marks in PHP: 60
Your total is: 180
Your percentage is: 60
Second Class
bibek@bibek-H310M-H-2-0:~/Linux_Practical/Class_5$ bash report.sh
Please enter your marks in Unix: 45
Please enter your marks in VB.NET: 51
Please enter your marks in PHP: 43
Your total is: 139
Your percentage is: 46
Third Class
bibek@bibek-H310M-H-2-0:~/Linux_Practical/Class_5$ bash report.sh
Please enter your marks in Unix: 46
Please enter your marks in VB.NET: 35
Please enter your marks in PHP: 30
Your total is: 111
Your percentage is: 37
Fail
bibek@bibek-H310M-H-2-0:~/Linux_Practical/Class_5$
```

3. Write a shell script to check if name given is file or directory and if it is file then it should display content and if it is a directory then it should display the list.

```
bibekjyotinath@Bibekjyotis-MacBook-Air Class_5 % cat fileordirectory.sh
#!/bin/bash

#getting i/p from the user
read -p "Please enter a name to check if it is a file or directory: " name

#to check if the entered name is a file or a directory
if [ -f $name ];
then echo "The entered name is a file. The contents of the file is: "; cat $name
else
echo "The entered name is a directory. Here is the contents of the directory: "; ls -l $name
fi
bibekjyotinath@Bibekjyotis-MacBook-Air Class_5 % bash fileordirectory.sh
Please enter a name to check if it is a file or directory: /Users/bibekjyotinath/Desktop/Class_5/temp.txt
The entered name is a file. The contents of the file is:
bibek
chinky
sam
student
bibekjyotinath@Bibekjyotis-MacBook-Air Class_5 % bash fileordirectory.sh
Please enter a name to check if it is a file or directory: /Users/bibekjyotinath/Desktop/Class_5
The entered name is a directory. Here is the contents of the directory:
total 744
-rw-r--r--@ 1 bibekjyotinath  staff   350614 Oct  6 19:26 Assignment 5 1510_Bibekjyoti Nath.docx
-rwxrwxrwx  1 bibekjyotinath  staff      6 Oct  6 07:17 f1
-rwxrwxrwx  1 bibekjyotinath  staff      85 Oct  6 11:51 filedirectory.sh.save
-rw-r--r--@ 1 bibekjyotinath  staff    371 Oct  6 19:44 fileordirectory.sh
-rwxrwxrwx@ 1 bibekjyotinath  staff    754 Oct  6 10:18 report.sh
-rwxrwxrwx@ 1 bibekjyotinath  staff    264 Oct  6 08:35 shellprogram.sh
-rwxrwxrwx@ 1 bibekjyotinath  staff     25 Oct  6 08:37 temp.txt
-rw-r--r--@ 1 bibekjyotinath  staff    162 Oct  6 19:25 ~$signmet 5 1510_Bibekjyoti Nath.docx
bibekjyotinath@Bibekjyotis-MacBook-Air Class_5 %
```

4.Creat calculator using case.

```
bibekjyotinath@Bibekjyotis-MacBook-Air Class_5 % cat casearithmetic.sh
#!/bin/bash

#variable declaration
sum=0

#taking i/p from the user
echo " Enter one no."
read n1
echo "Enter second no."
read n2

#diplaying the arithmetic operation options
echo "1.Addition"
echo "2.Subtraction"
echo "3.Multiplication"
echo "4.Division"
echo "Enter your choice"
read ch
case $ch in
    1)sum=`expr $n1 + $n2`      #addition operation
        echo "Sum ="$sum;;      #displaying o/p
    2)sum=`expr $n1 - $n2`      #subtraction operation
        echo "Sub = "$sum;;     #displaying o/p
    3)sum=`expr $n1 \* $n2`     #multiplication operation
        echo "Mul = "$sum;;     #displayinh o/p
    4)sum=`expr $n1 / $n2`     #divison operation
        echo "Div = "$sum;;     #displaying o/p
    *)echo "Invalid choice";;   #if incorrect option selected will give this message
esac                             #end of case

bibekjyotinath@Bibekjyotis-MacBook-Air Class_5 %
```

```
[bibekjyotinath@Bibekjyotis-MacBook-Air Class_5 % bash casearithmatic.sh
Enter one no.
12
Enter second no.
12
1.Addition
2.Subtraction
3.Multiplication
4.Division
Enter your choice
1
Sum =24
[bibekjyotinath@Bibekjyotis-MacBook-Air Class_5 % bash casearithmatic.sh
Enter one no.
23
Enter second no.
23
1.Addition
2.Subtraction
3.Multiplication
4.Division
Enter your choice
3
Mul = 529
[bibekjyotinath@Bibekjyotis-MacBook-Air Class_5 % bash casearithmatic.sh
Enter one no.
234
Enter second no.
212
1.Addition
2.Subtraction
3.Multiplication
4.Division
Enter your choice
2
Sub = 22
[bibekjyotinath@Bibekjyotis-MacBook-Air Class_5 % bash casearithmatic.sh
Enter one no.
12
Enter second no.
6
1.Addition
2.Subtraction
3.Multiplication
4.Division

Enter your choice
4
Div = 2
bibekjyotinath@Bibekjyotis-MacBook-Air Class_5 % $
```

5. Write a shell script to accept input from student

Like

Name:

Roll no:

Branch:

City:

And store that record in file student.dat

```
bibekjyotinath@Bibekjyotis-MacBook-Air Class_5 % cat recordtofile.sh
#!/bin/bash

#getting i/p from the user
read -p "Enter your name: " name
read -p "Enter your roll number: " rollno
read -p "Enter your branch: " branch
read -p "Enter your city: " city

if [ ! -f student.dat ] #checking if the file exists
then touch student.dat; final=$name:$rollno:$branch:$city; $final >>student.dat #if file doesn't exist creating the file
else final=$name:$rollno:$branch:$city #concatinating the data to a new variable
echo $final >> student.dat #saving the data in the file
fi

bibekjyotinath@Bibekjyotis-MacBook-Air Class_5 % bash recordtofile.sh
Enter your name: Sagar Puranik
Enter your roll number: 1515
Enter your branch: DAI
Enter your city: Pune
bibekjyotinath@Bibekjyotis-MacBook-Air Class_5 % cat student.dat
Sagar Puranik:1515:DAI:Pune
bibekjyotinath@Bibekjyotis-MacBook-Air Class_5 % bash recordtofile.sh
Enter your name: Bibekjyoti Nath
Enter your roll number: 1510
Enter your branch: DBDA
Enter your city: Delhi
bibekjyotinath@Bibekjyotis-MacBook-Air Class_5 % cat student.dat
Sagar Puranik:1515:DAI:Pune
Bibekjyoti Nath:1510:DBDA:Delhi
bibekjyotinath@Bibekjyotis-MacBook-Air Class_5 % █
```