20MCA136-NETWORKING & ADMINISTRATION LAB

Shell Scripting

LAB Assignment

SUBMITTED BY,

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R MCA-2020-S2

ROLL NO : 42

SUBMITTED TO ,

Meera MISS

1. Write a shell script to ask your name, and college name and print it on the screen.

```
vivin@vivin:~$ vi Student.sh
vivin@vivin:~$ bash Student.sh
Enter the Details and view
========================
Enter Your Name
Vivin V Abraham
Enter Your College Name
Amal Jyothi College Of Engineering
```

vivin@vivin: ~

File Edit View Search Terminal Help

```
#!/bin/bash
echo "Enter the Details and view"
echo "======================"
echo "Enter Your Name"
read name
echo "Enter Your College Name"
read college
clear
echo "Details you entered"
echo "Name :"$name
echo "College :"$college

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:wq
```
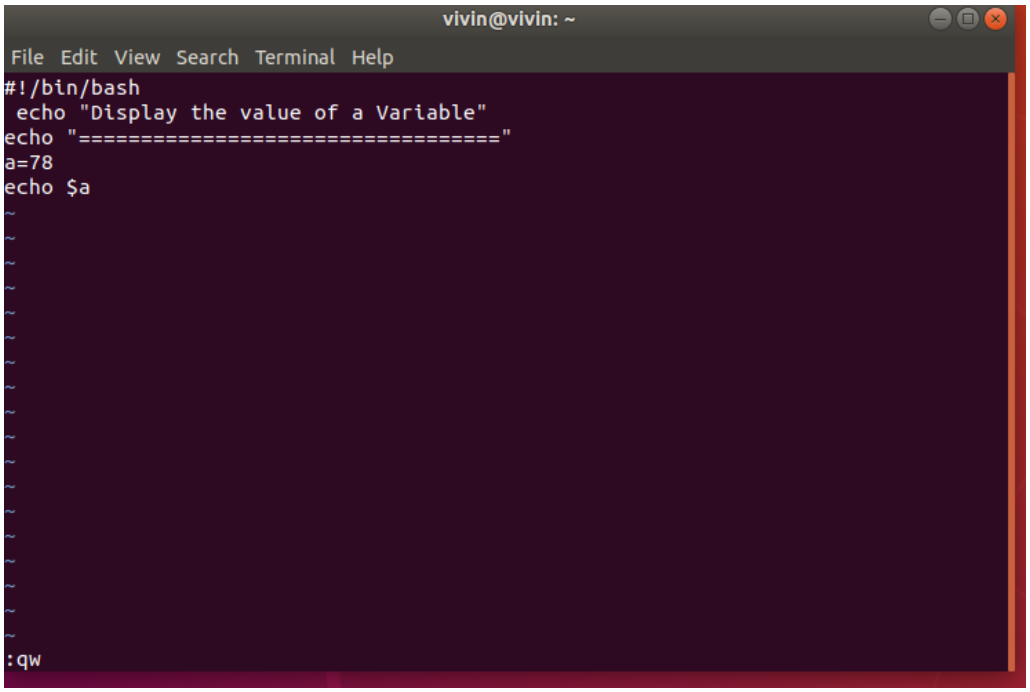

```
Details you entered
Name :Vivin V Abraham
College :Amal Jyothi College Of Engineering
vivin@vivin:~$
```

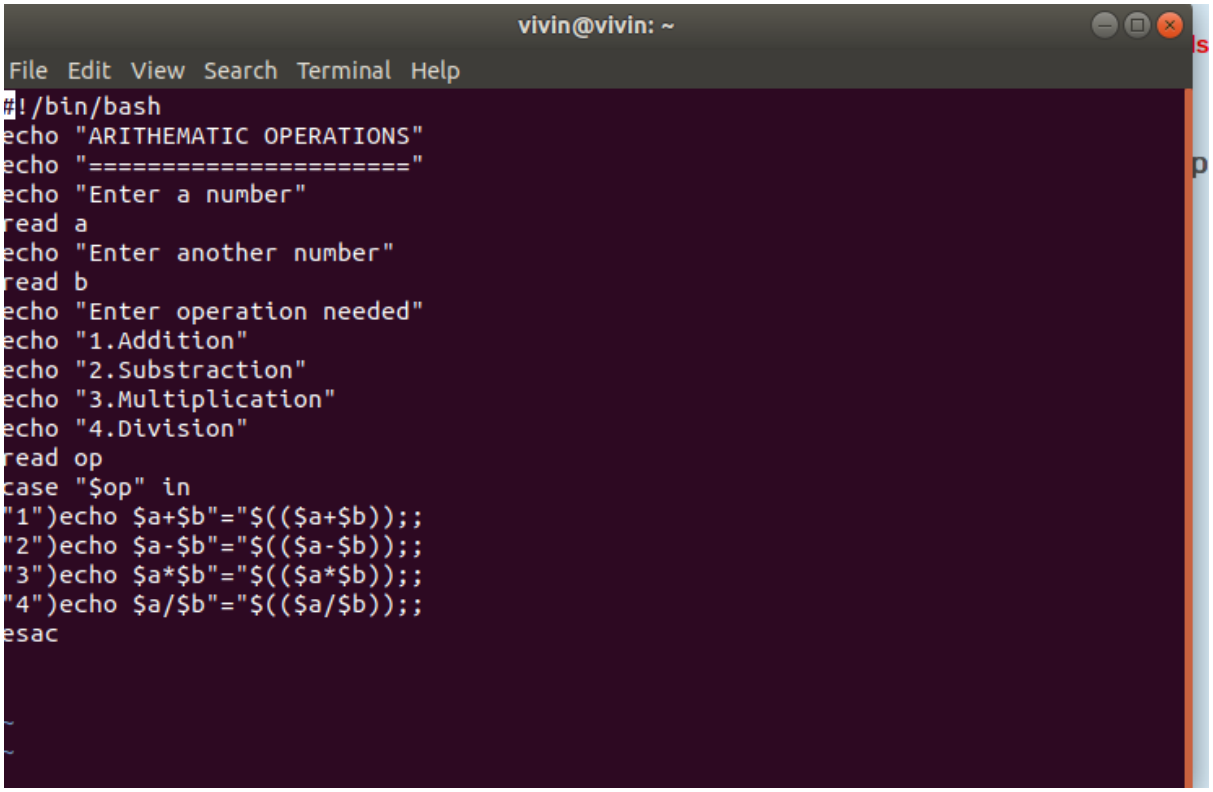
2. Write a shell script to set a value for a variable and display it on command line interface.

```
vivin@vivin:~$ vi display.sh
vivin@vivin:~$ bash display.sh
Display the value of a Variable
================================
78
vivin@vivin:~$
```

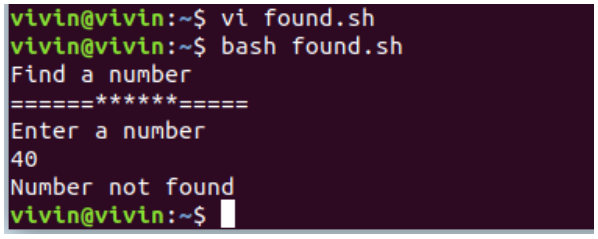


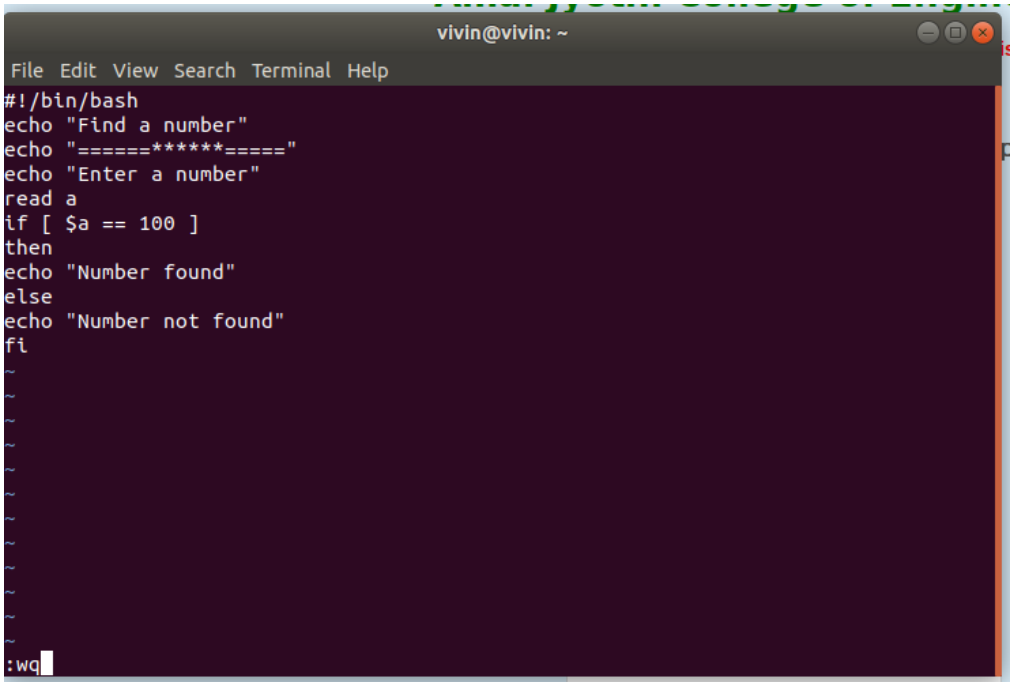
3. Write a shell script to perform addition, substation, multiplication, division with two numbers that is accepted from user.

```
vivin@vivin:~$ bash arithematic.sh
ARITHEMATIC OPERATIONS
======================
Enter a number
4
Enter another number
3
Enter operation needed
1.Addition
2.Substraction
3.Multiplication
4.Division
3
4*3=12
```



4. Write a shell script to check the value of a given number and display whether the number is found or not.





5. Write a shell script to display current date, calendar.

```
vivin@vivin:~$ vi found.sh
vivin@vivin:~$ vi calender.sh
vivin@vivin:~$ bash calender.sh
Time and Calender
********************
Today is Sat Oct  2 20:33:48 IST 2021

Calender:
    October 2021
Su Mo Tu We Th Fr Sa
                1  2
 3  4  5  6  7  8  9
10 11 12 13 14 15 16
17 18 19 20 21 22 23
24 25 26 27 28 29 30
31
vivin@vivin:~$
```

vivin@vivin: ~

File Edit View Search Terminal Help

```
#!/bin/bash
echo "Time and Calender"
echo "********************"
echo "Today is $(date)"
echo ""
echo "Calender:"
cal
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:wq
```

6. Write a shell script to check a number is even or odd.

```
vivin@vivin:~$ vi evenodd.sh
vivin@vivin:~$ bash evenodd.sh
Even Or Odd
*******************
Enter a number
2
Number is Even
vivin@vivin:~$ bash evenodd.sh
Even Or Odd
*******************
Enter a number
3
Number is Odd
vivin@vivin:~$
```

```
vivin@vivin: ~
File  Edit  View  Search  Terminal  Help
#!/bin/bash
echo "Even Or Odd"
echo "******************"
echo "Enter a number "
read n
x=$(($n%2))
if [ $x == 0 ];
then
echo "Number is Even"
else
echo "Number is Odd"
fi


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:wq
```
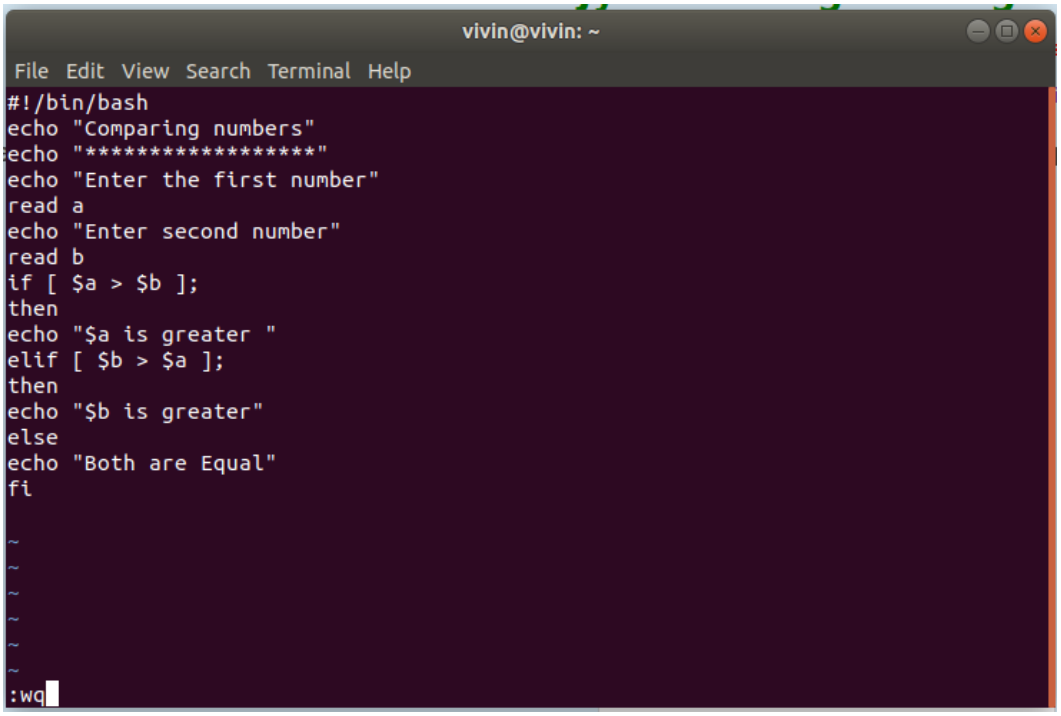
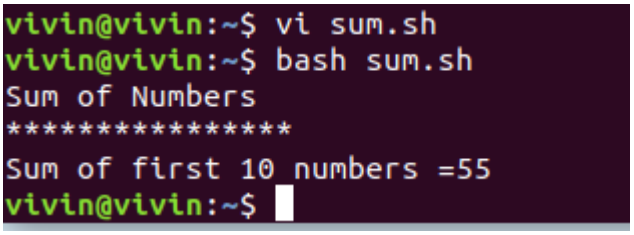
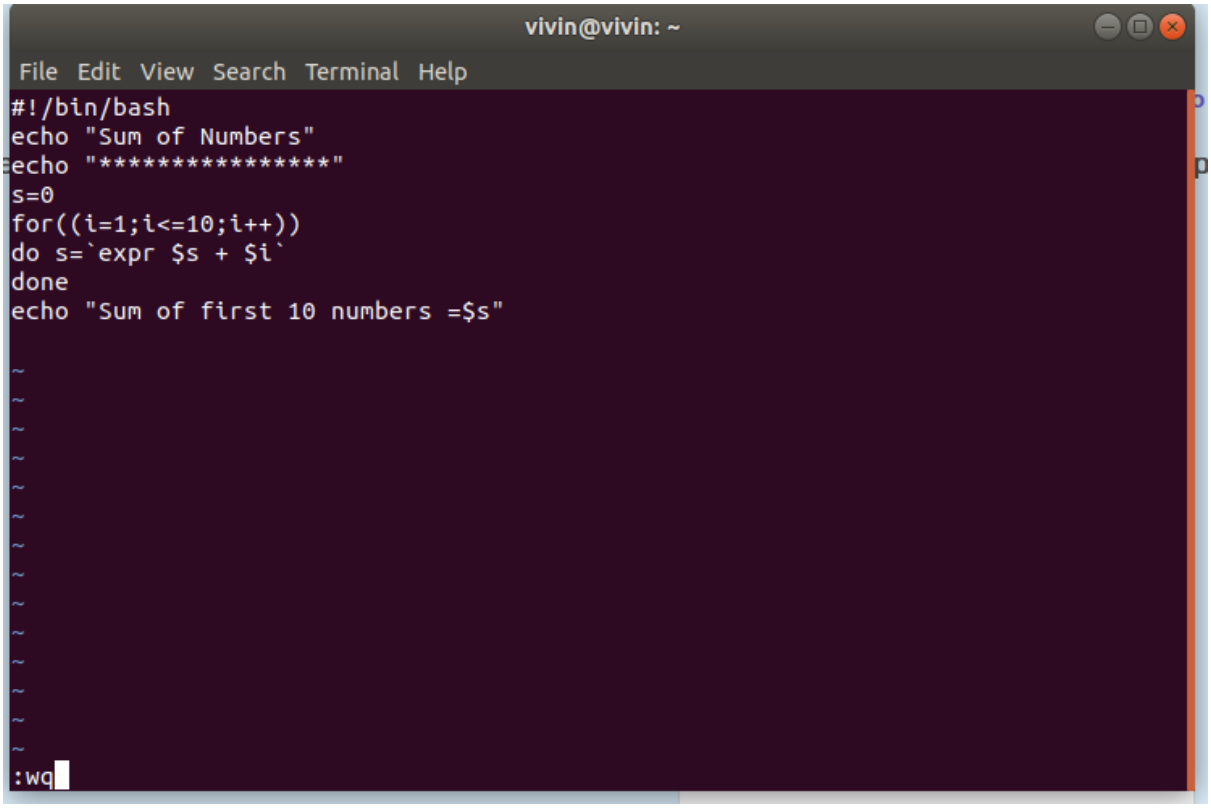

7. Write a shell script to check a number is greater than, less than or equal to another number.

```
vivin@vivin:~$ vi greater.sh
vivin@vivin:~$ bash greater.sh
Comparing numbers
******************
Enter the first number
4
Enter second number
3
4 is greater
vivin@vivin:~$
```



8. Write a shell script to find the sum of first 10 numbers





9. Write a shell script to find the sum, the average and the product of the four integers entered.

```
The product of these numbers are:420
vivin@vivin:~$ bash sap.sh
AVG,SUM & Product of 4 numbers
************************************
Please enter your first number:
6
Enter the second number
4
Enter the Third number
7
Enter the fourth number
3
The sum of these numbers are:20
The average of these numbers are:5
The product of these numbers are:504
vivin@vivin:~$
```

vivin@vivin: ~

File Edit View Search Terminal Help

```
#!/bin/bash
echo "AVG,SUM & Product of 4 numbers"
echo "************************************"
echo "Please enter your first number: "
read a
echo "Enter the second number"
read b
echo "Enter the Third number"
read c
echo "Enter the fourth number"
read d
sum=$(($a + $b + $c +$d))
avg=$(($sum/4))
prod=$(($a * $b *$c * $d))
echo "The sum of these numbers are:"$sum
echo "The average of these numbers are:"$avg
echo "The product of these numbers are:"$prod

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:wq
```

10. Write a shell script to find the smallest of three numbers

```
vivin@vivin:~$ bash smt.sh
LARGEST OF THREE
******************
Enter first number
56
Enter Second number
2
Enter Third number
5
2 is small
vivin@vivin:~$
```

```
#!/bin/bash
echo "LARGEST OF THREE"
echo "******************"
echo "Enter first number"
read a
echo "Enter Second number"
read b
echo "Enter Third number"
read c
if [ $a -lt $b ];
then
        if [ $a -lt $c ];
        then
                echo "$a is small"
        else
                echo "$c is small"
        fi
elif [ $b -lt $c ];
then
        echo "$b is small"
else
        echo "$c is small"
fi

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```
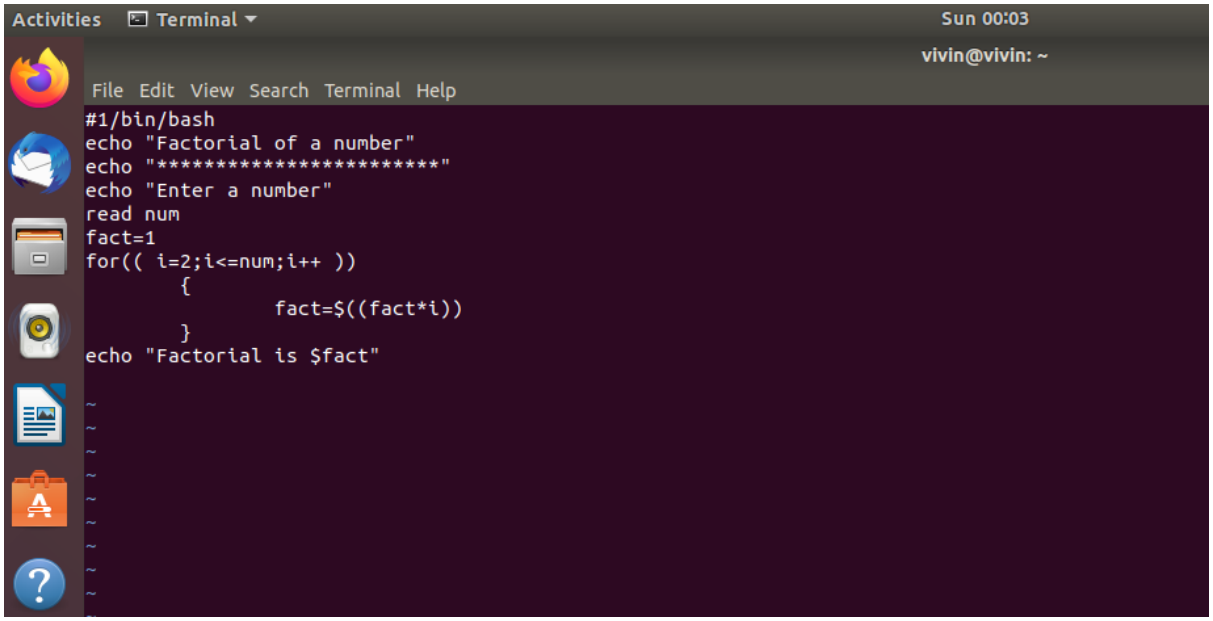

11. Write a shell program to find factorial of given number.

```
vivin@vivin:~$ vi fact.sh
vivin@vivin:~$ bash fact.sh
Factorial of a number
**********************
Enter a number
5
Factorial is 120
vivin@vivin:~$
```



12. Write a shell program to check a number is palindrome or not

```
vivin@vivin:~$ vi pal.sh
vivin@vivin:~$ bash pal.sh
Check Palindrome Or Not
*********************************
Enter number to check
454
Number is Palindrome
vivin@vivin:~$ bash pal.sh
Check Palindrome Or Not
*********************************
Enter number to check
2322
Number is not palindrome
vivin@vivin:~$
```

```
#!/bin/bash
echo "Check Palindrome Or Not"
echo "*******************************"
echo "Enter number to check"
read n
rev=$(echo $n | rev)
if [ $n -eq $rev ];
then
echo "Number is Palindrome "
else
echo "Number is not palindrome"
fi

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```
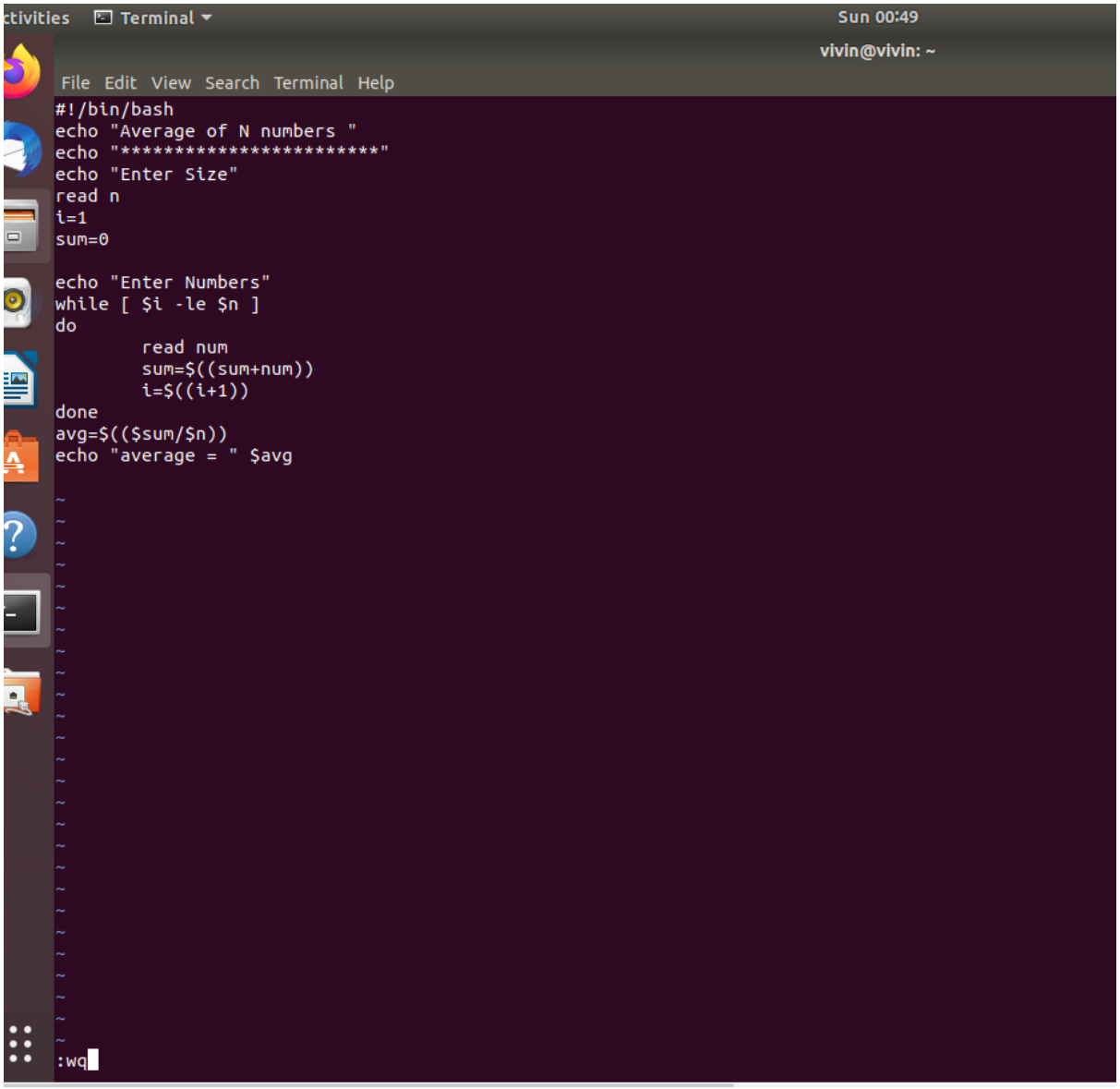
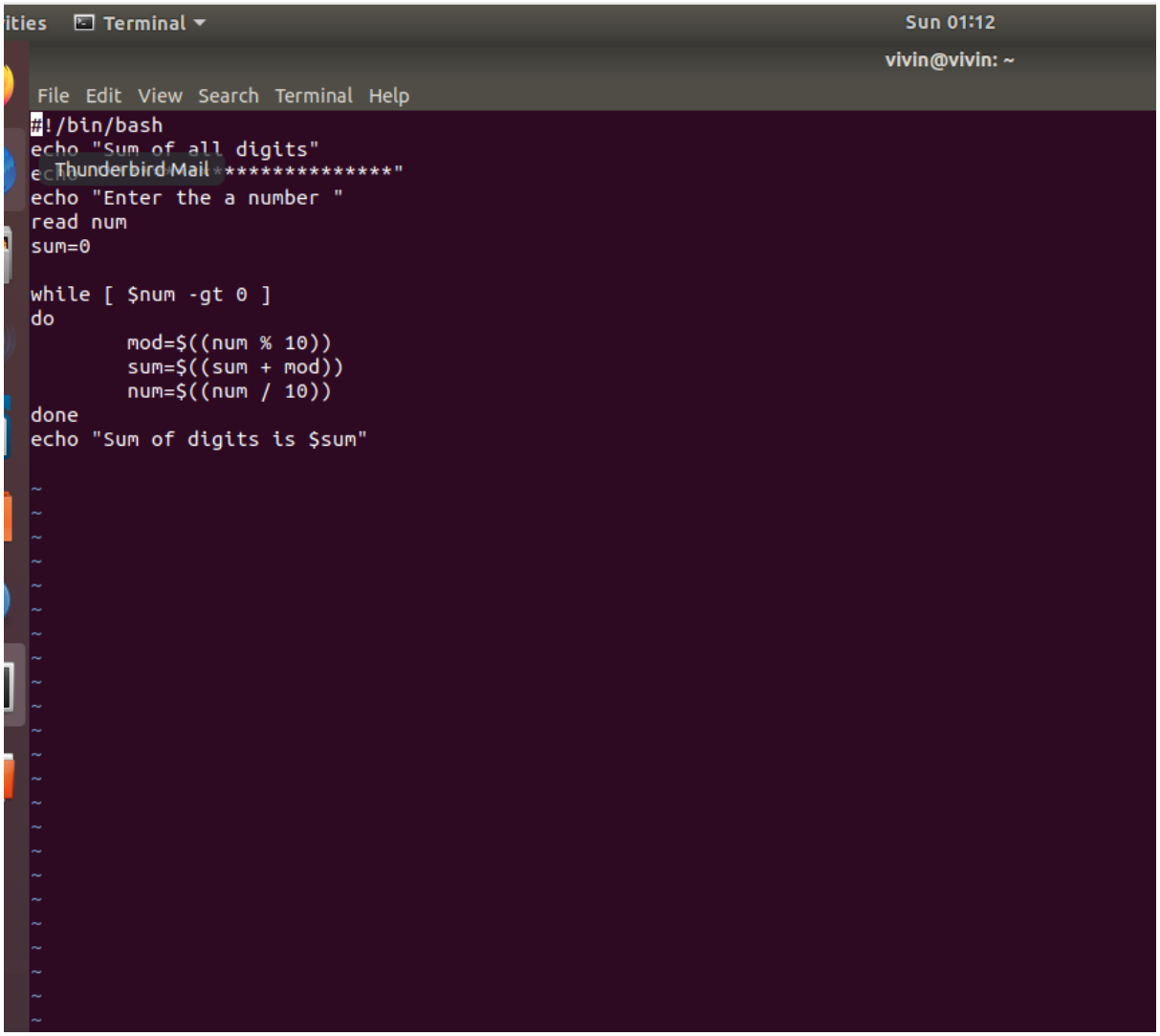

13. Write a shell script to find the average of the numbers entered in command line

```
vivin@vivin:~$ vi fa.sh
vivin@vivin:~$ bash fa.sh
Average of N numbers
************************
Enter Size
4
Enter Numbers
23
25
23
25
average =  24
vivin@vivin:~$
```



14. Write a shell program to find the sum of all the digits in a number

```
vivin@vivin:~$ vi sd.sh
vivin@vivin:~$ bash sd.sh
Sum of all digits
************************
Enter the a number
154
Sum of digits is 10
vivin@vivin:~$
```



15. Write a shell Script to check whether given year is leap year or not.

```
vivin@vivin:~$ vi lp.sh
vivin@vivin:~$ bash lp.sh
LEAP YEAR OR NOT
*****************
Enter the year
2000
2000 is leap year
vivin@vivin:~$ bash lp.sh
LEAP YEAR OR NOT
*****************
Enter the year
1997
1997 is not leap yea
vivin@vivin:~$
```