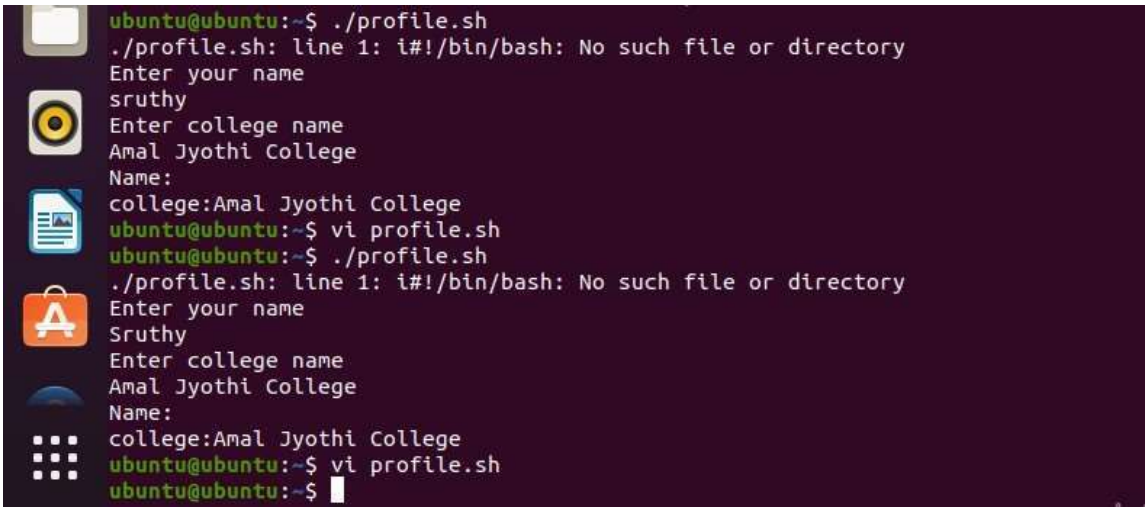
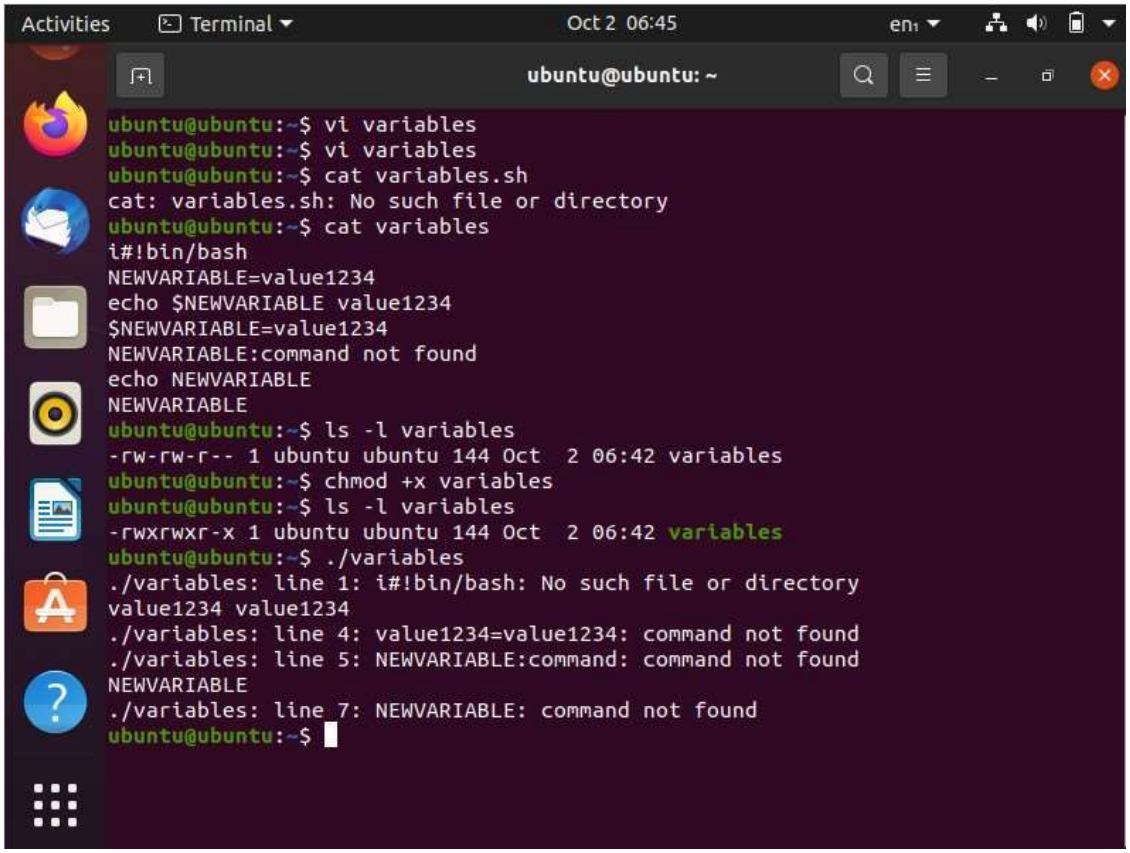
1. vi

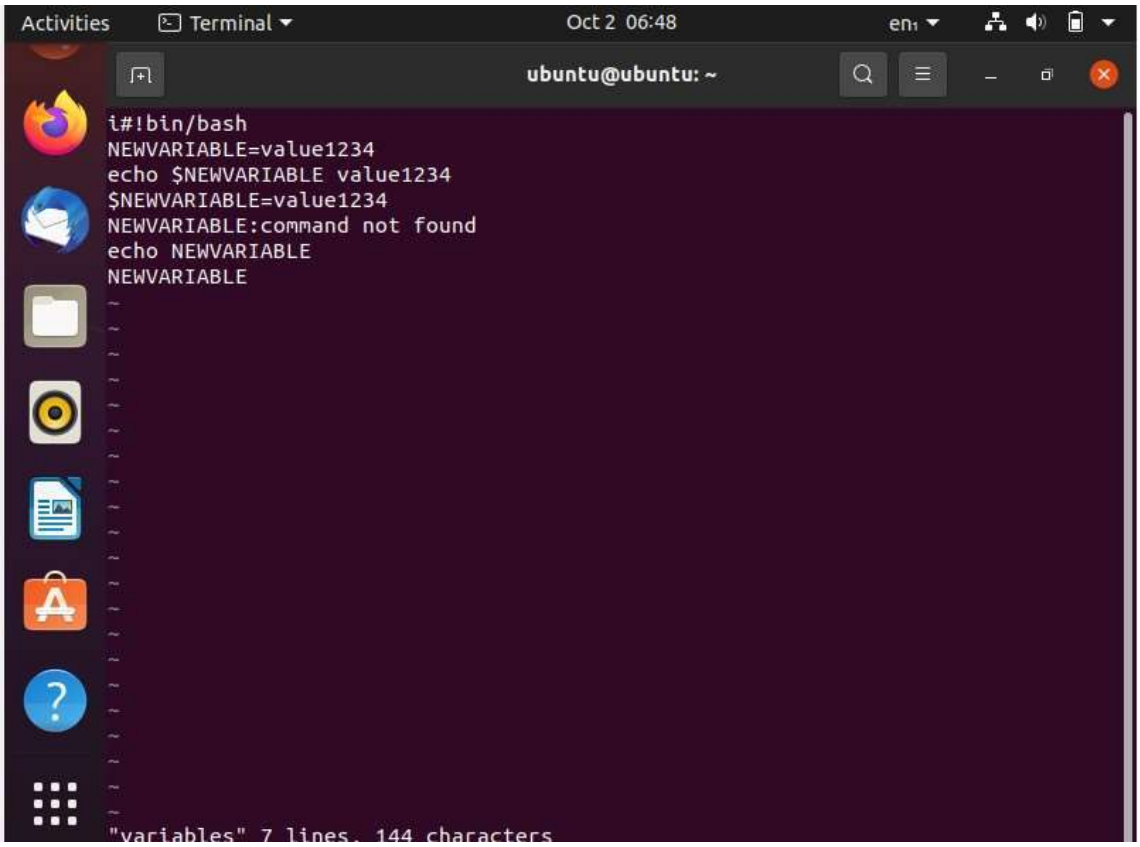
```
Thunderbird Mail
alBox:~/Desktop$ vi raman.sh
user@user-VirtualBox:~/Desktop$ vi biod.sh
user@user-VirtualBox:~/Desktop$ cat vi biod.sh
cat: vi: No such file or directory

echo enter your name
read sujithj
echo enter college name
read amal jyothi college
echo Name:$name
echo college:$amal jyothi college
```

```
user@user-VirtualBox:~/Desktop$ ls -l biod.sh
-rw-rw-r-- 1 user user 135 Oct  2 22:44 biod.sh
user@user-VirtualBox:~/Desktop$ chmod +x biod.sh
user@user-VirtualBox:~/Desktop$ ls -l biod.sh
-rwxrwxr-x 1 user user 135 Oct  2 22:44 biod.sh
user@user-VirtualBox:~/Desktop$ ./biod.sh
enter your name
Terminal
enter college name
amal jyothi college
Name:
college:amal jyothi college
```

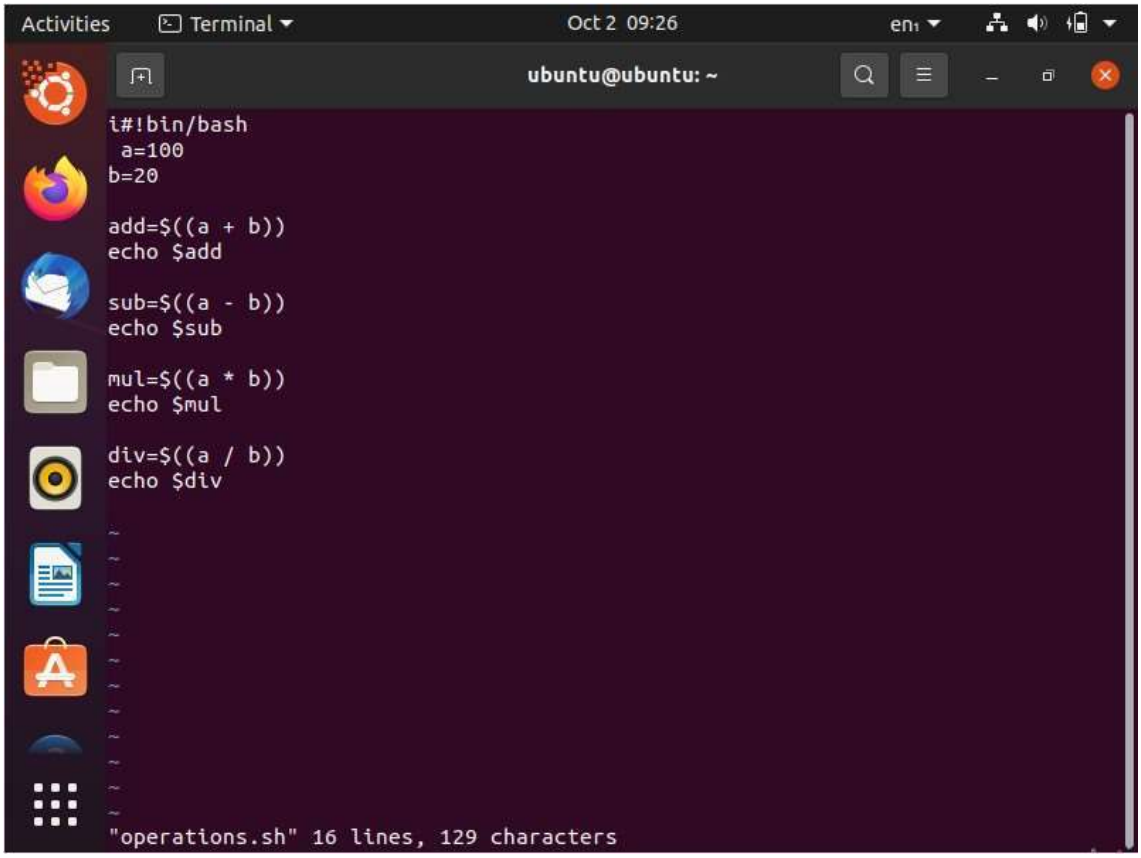


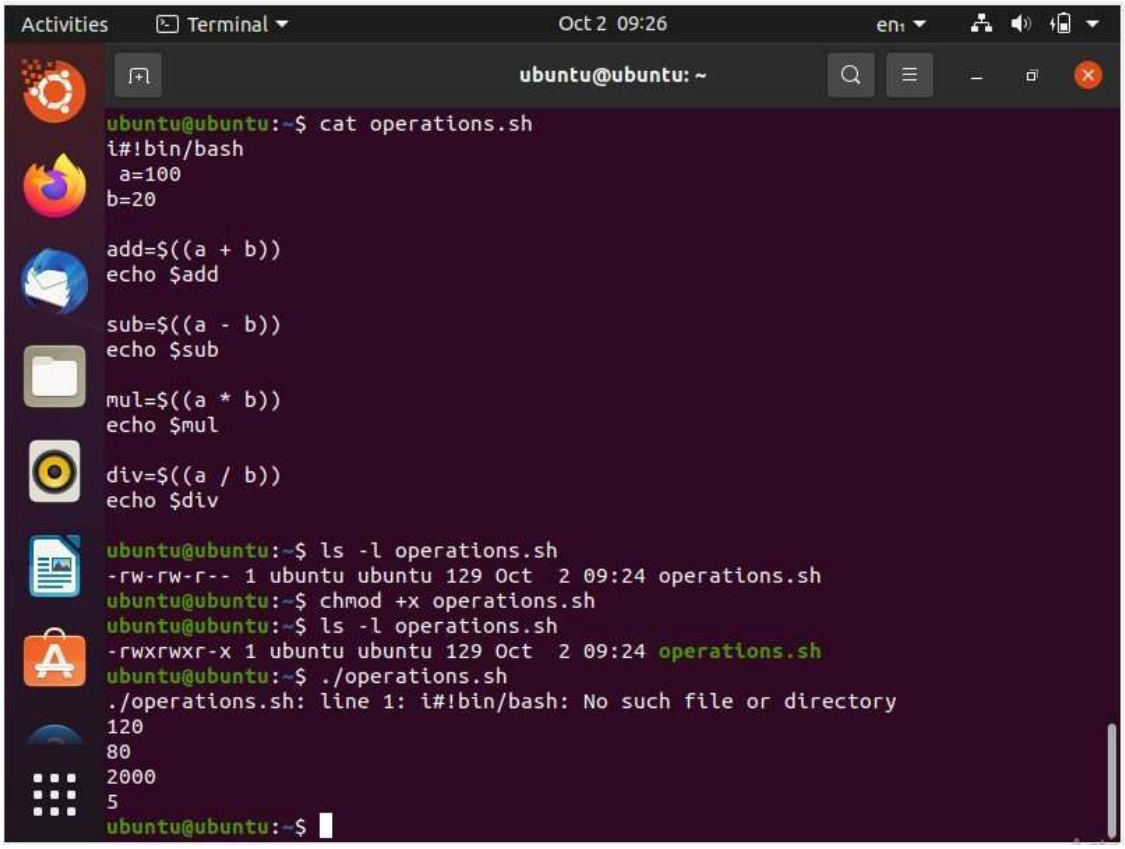
2. **Write a shell script to set a value for a variable and display it on command line interface.**



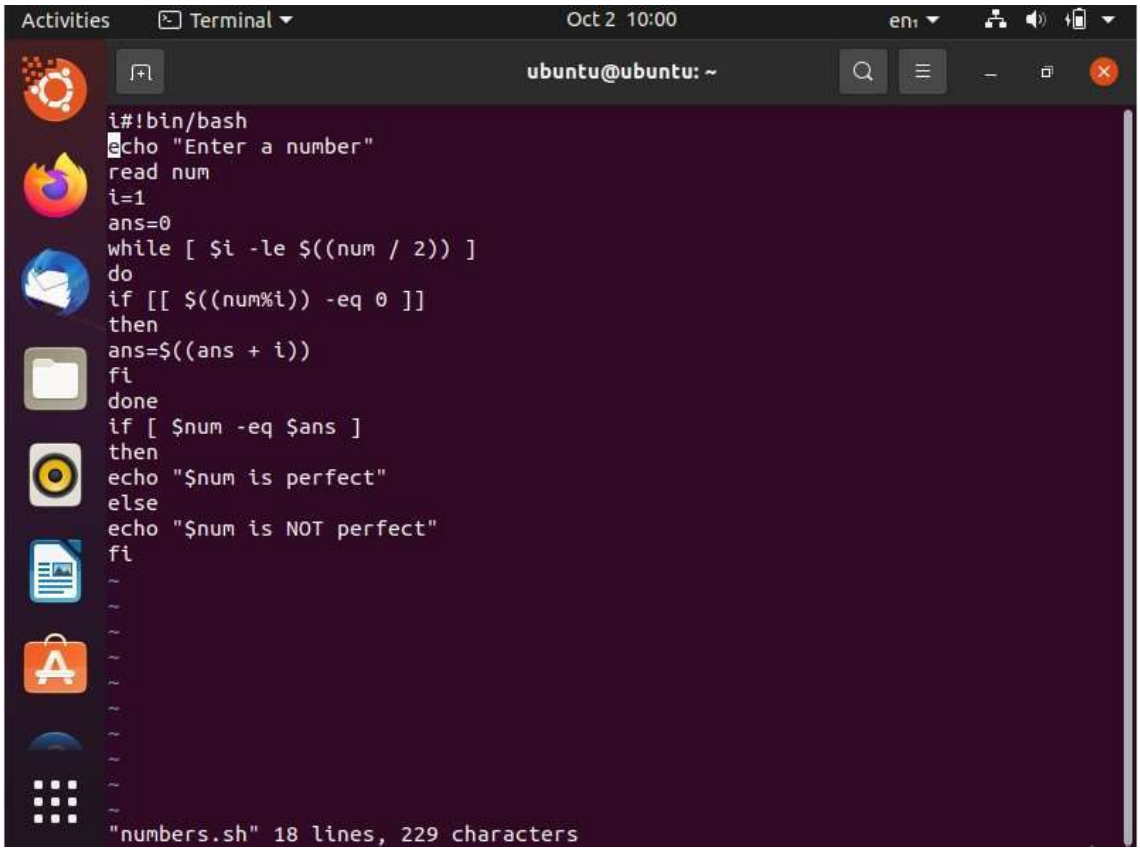


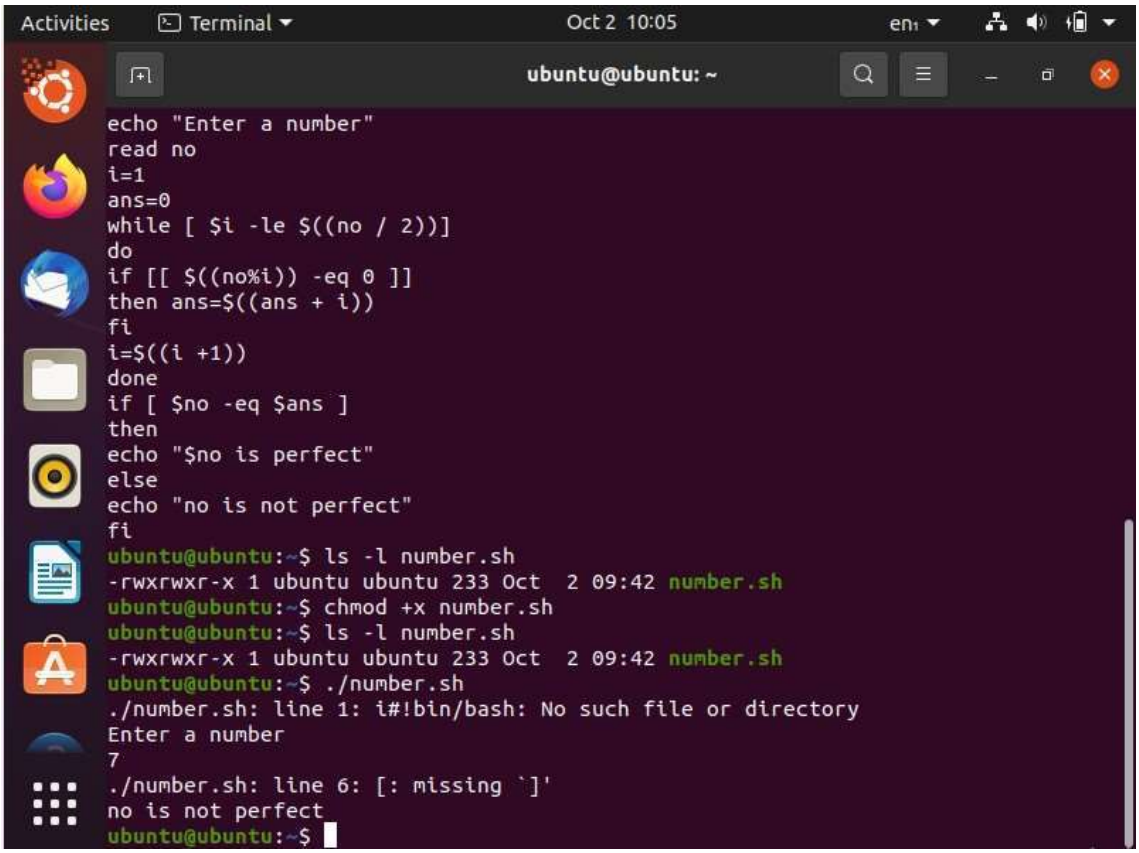
3. **Write a shell script to perform addition, substration, multiplication, division with two numbers that is accepted from user.**


Activities
Terminal
Oct 2 09:26
en
ubuntu@ubuntu: ~
i#!bin/bash
a=100
b=20
add=$((a + b))
echo $add
sub=$((a - b))
echo $sub
mul=$((a * b))
echo $mul
div=$((a / b))
echo $div
"operations.sh" 16 lines, 129 characters

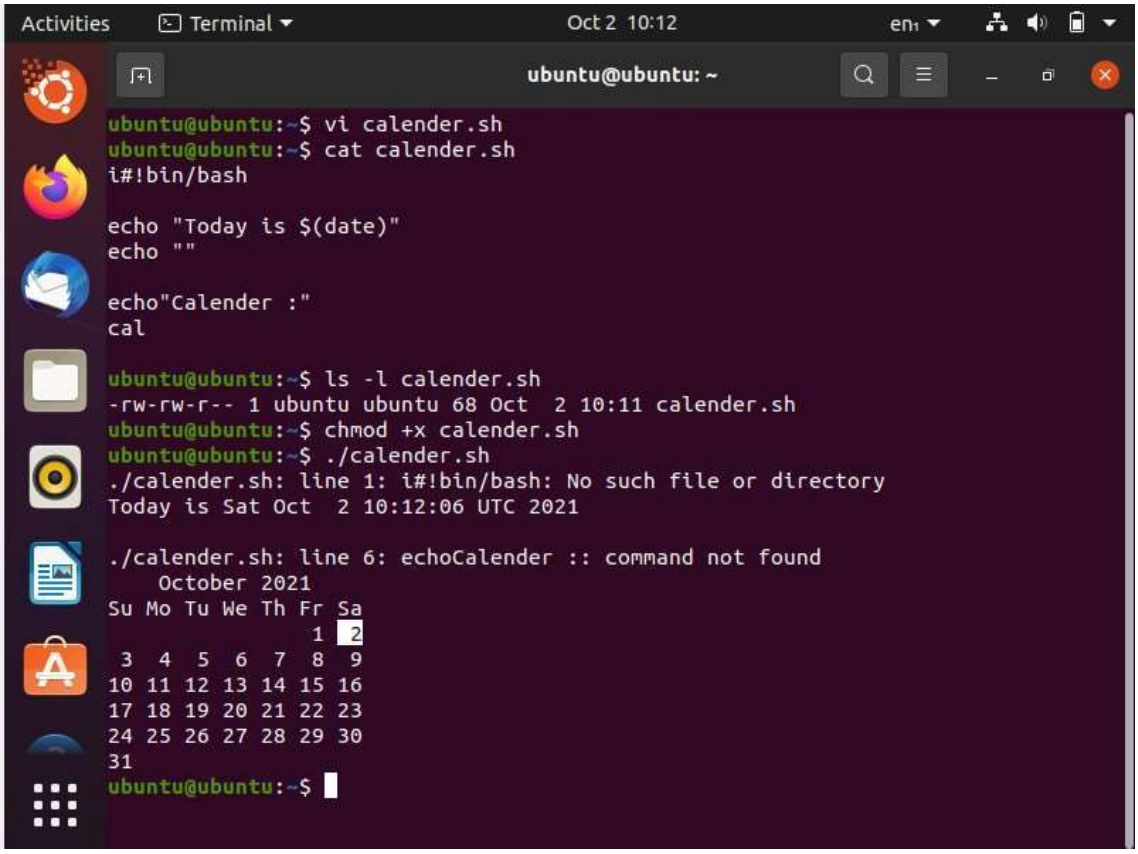

Activities
Terminal
Oct 2 09:26
en
ubuntu@ubuntu: ~
ubuntu@ubuntu:~$ cat operations.sh
i#!bin/bash
a=100
b=20
add=$((a + b))
echo $add
sub=$((a - b))
echo $sub
mul=$((a * b))
echo $mul
div=$((a / b))
echo $div
ubuntu@ubuntu:~$ ls -l operations.sh
-rw-rw-r-- 1 ubuntu ubuntu 129 Oct 2 09:24 operations.sh
ubuntu@ubuntu:~$ chmod +x operations.sh
ubuntu@ubuntu:~$ ls -l operations.sh
-rwxrwxr-x 1 ubuntu ubuntu 129 Oct 2 09:24 operations.sh
ubuntu@ubuntu:~$ ./operations.sh
./operations.sh: line 1: i#!bin/bash: No such file or directory
120
80
2000
5
ubuntu@ubuntu:~$

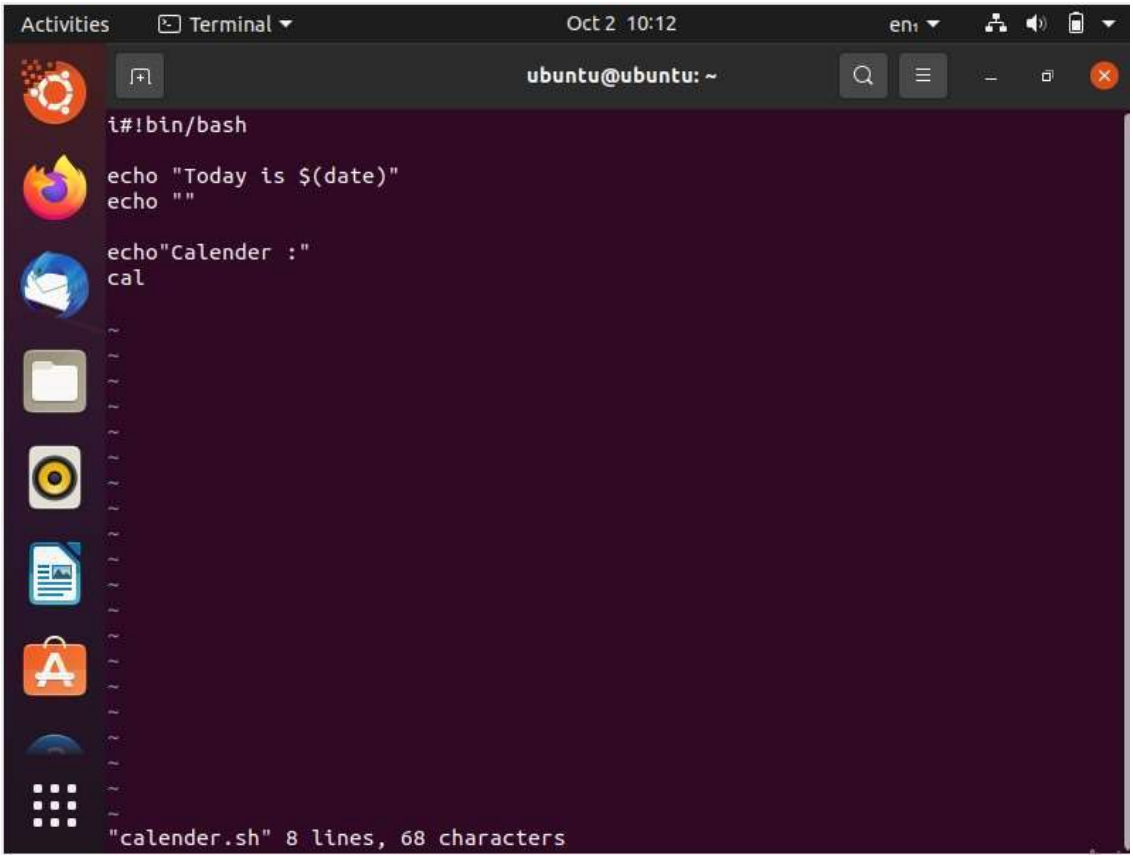
4. **Write a shell script to check the value of a given number and display whether the number is found or not.**



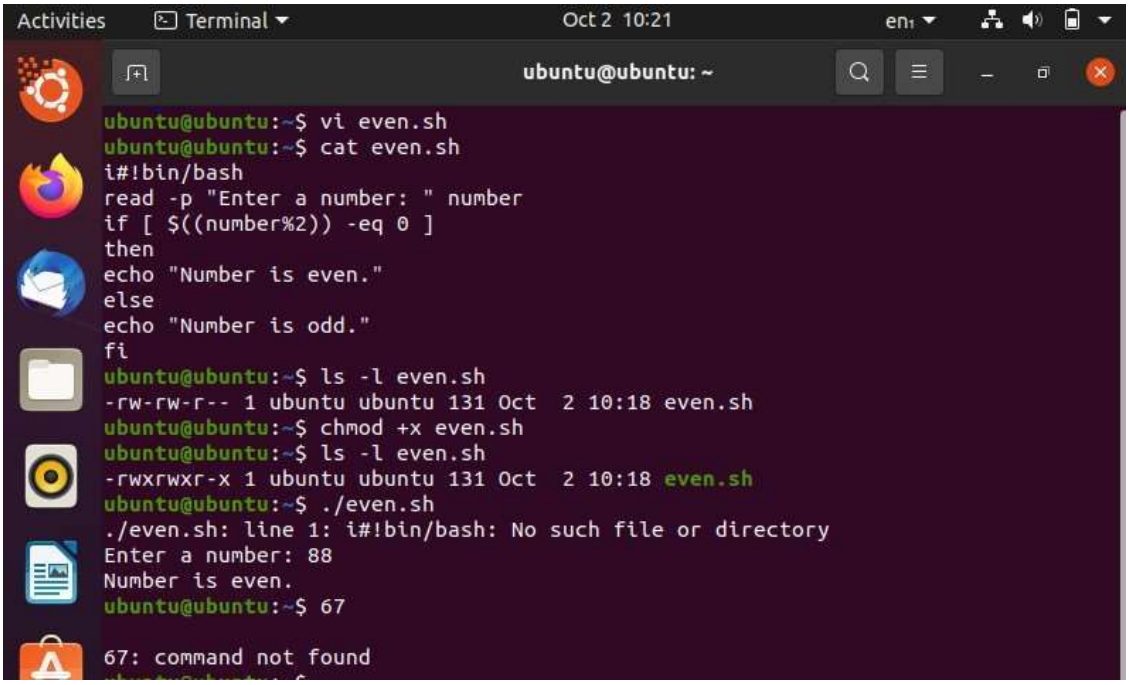

Activities
Terminal
Oct 2 10:05
en
ubuntu@ubuntu: ~
echo "Enter a number"
read no
i=1
ans=0
while [$i -le $((no / 2))]
do
if [[$((no%i)) -eq 0]]
then ans=$((ans + i))
fi
i=$((i +1))
done
if [$no -eq $ans]
then
echo "$no is perfect"
else
echo "no is not perfect"
fi
ubuntu@ubuntu:~$ ls -l number.sh
-rwxrwxr-x 1 ubuntu ubuntu 233 Oct 2 09:42 number.sh
ubuntu@ubuntu:~$ chmod +x number.sh
ubuntu@ubuntu:~$ ls -l number.sh
-rwxrwxr-x 1 ubuntu ubuntu 233 Oct 2 09:42 number.sh
ubuntu@ubuntu:~$ ./number.sh
./number.sh: line 1: i#!bin/bash: No such file or directory
Enter a number
7
./number.sh: line 6: [: missing `]'
no is not perfect
ubuntu@ubuntu:~$

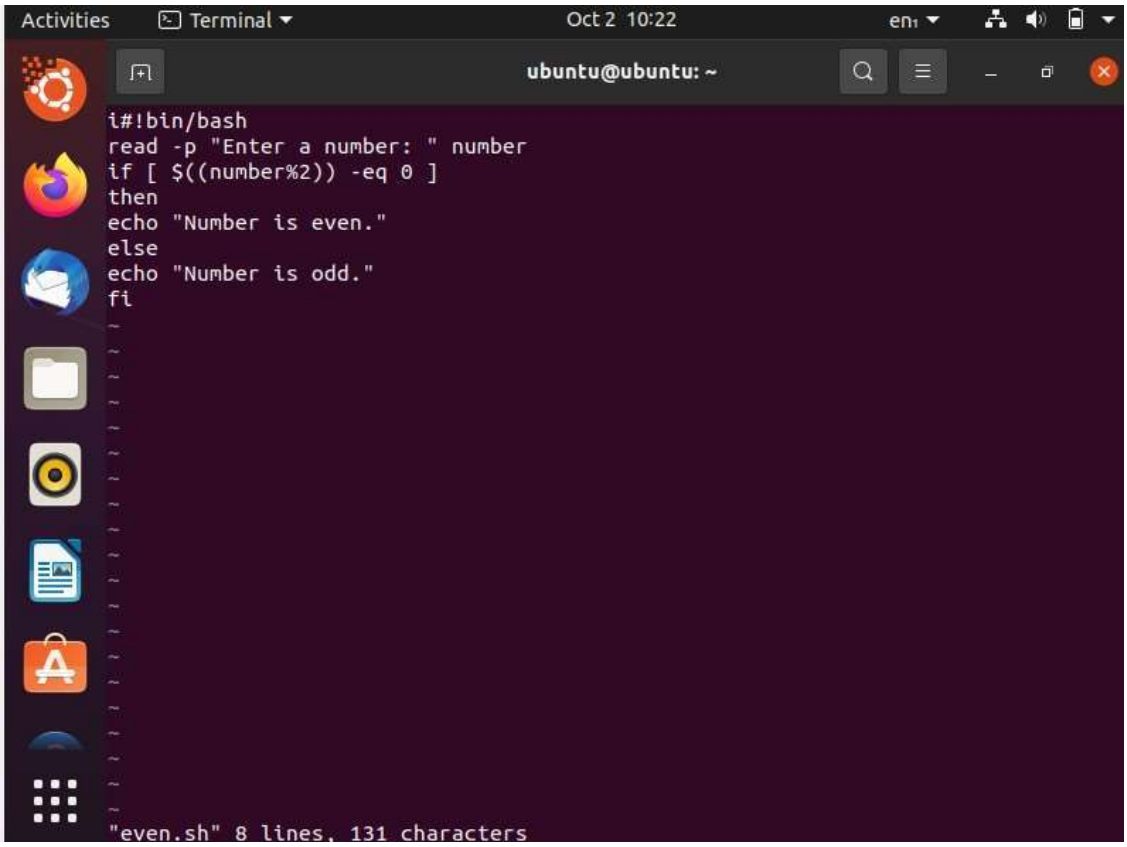
5. Write a shell script to display current date, calendar.



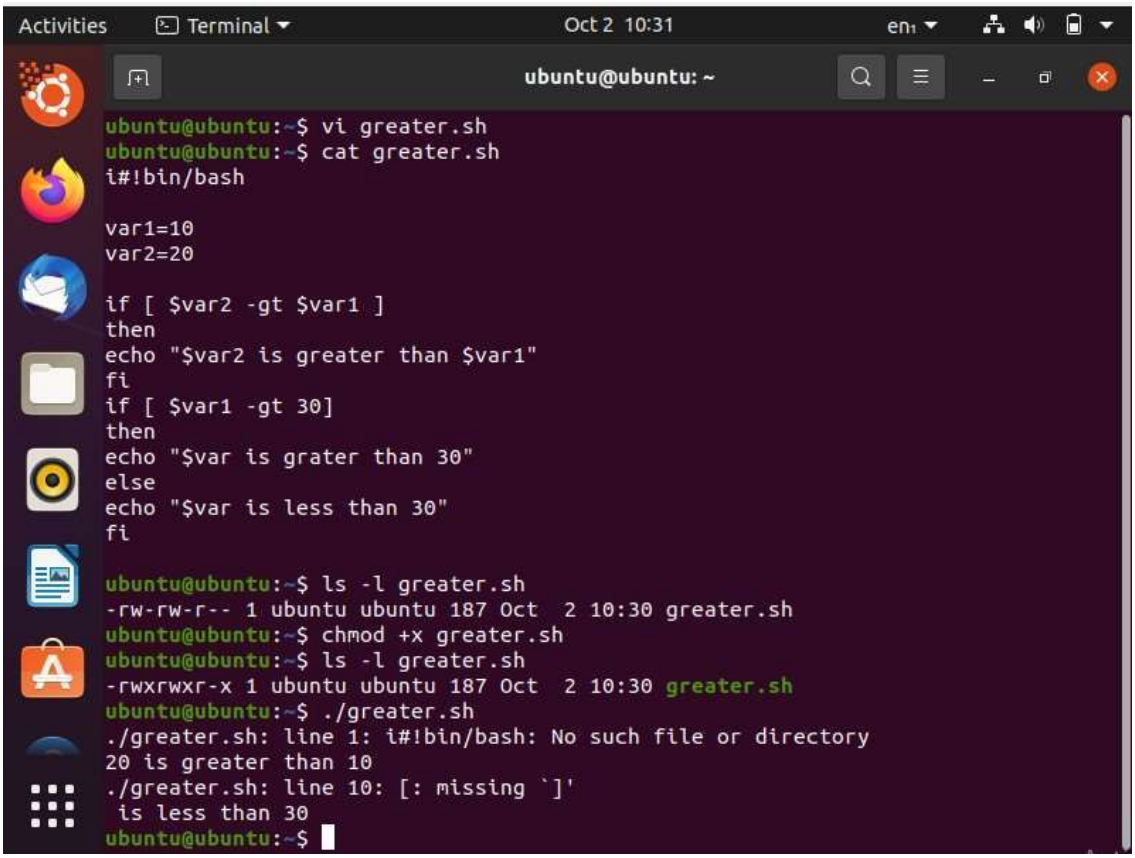


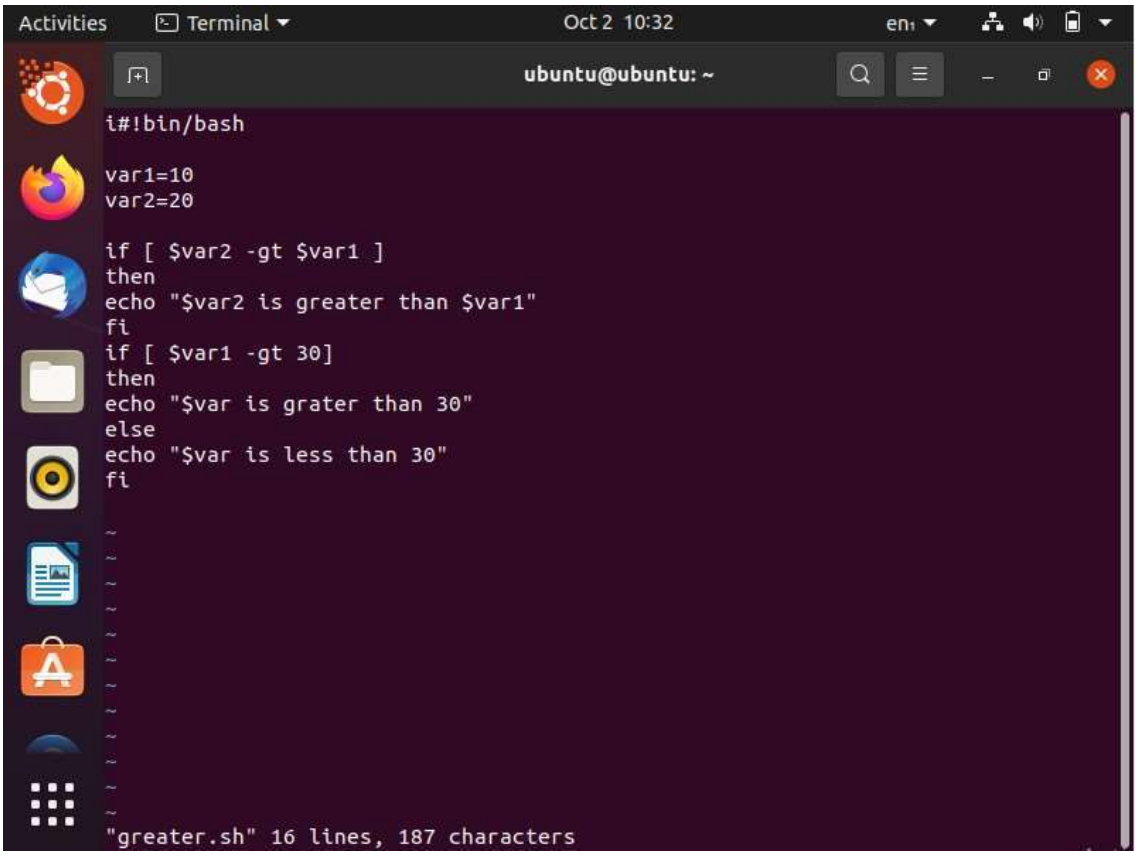
6. Write a shell script to check a number is even or odd.



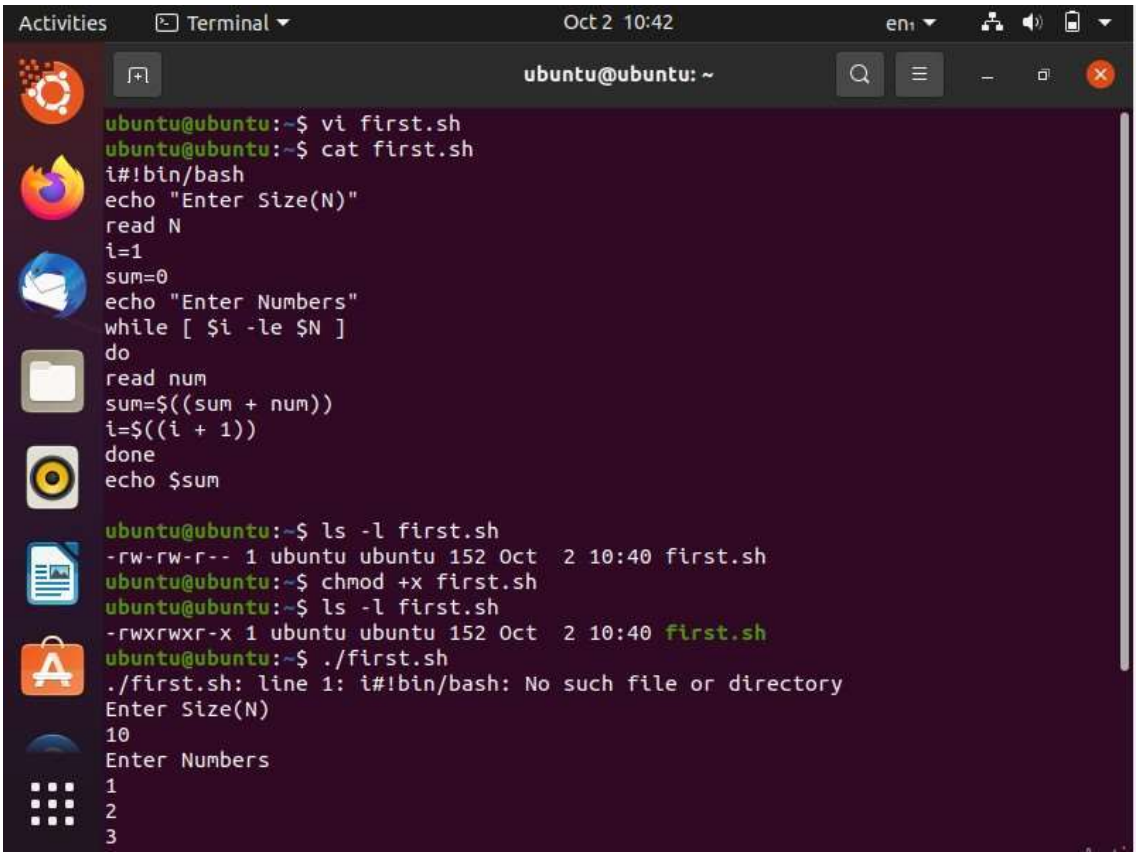

Activities
Terminal
Oct 2 10:22
en
ubuntu@ubuntu: ~
i#!bin/bash
read -p "Enter a number: " number
if [$((number%2)) -eq 0]
then
echo "Number is even."
else
echo "Number is odd."
fi
"even.sh" 8 lines, 131 characters

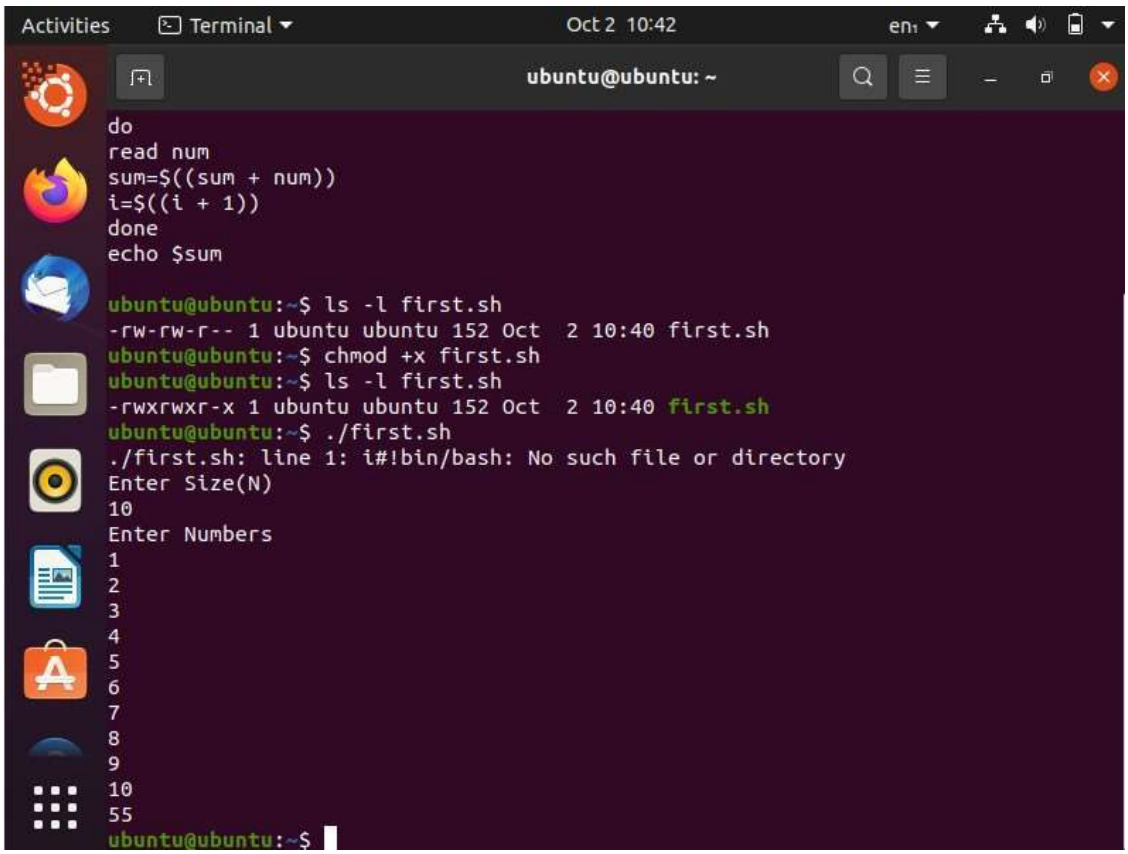
7. **Write a shell script to check a number is greater than, less than or equal to another number.**

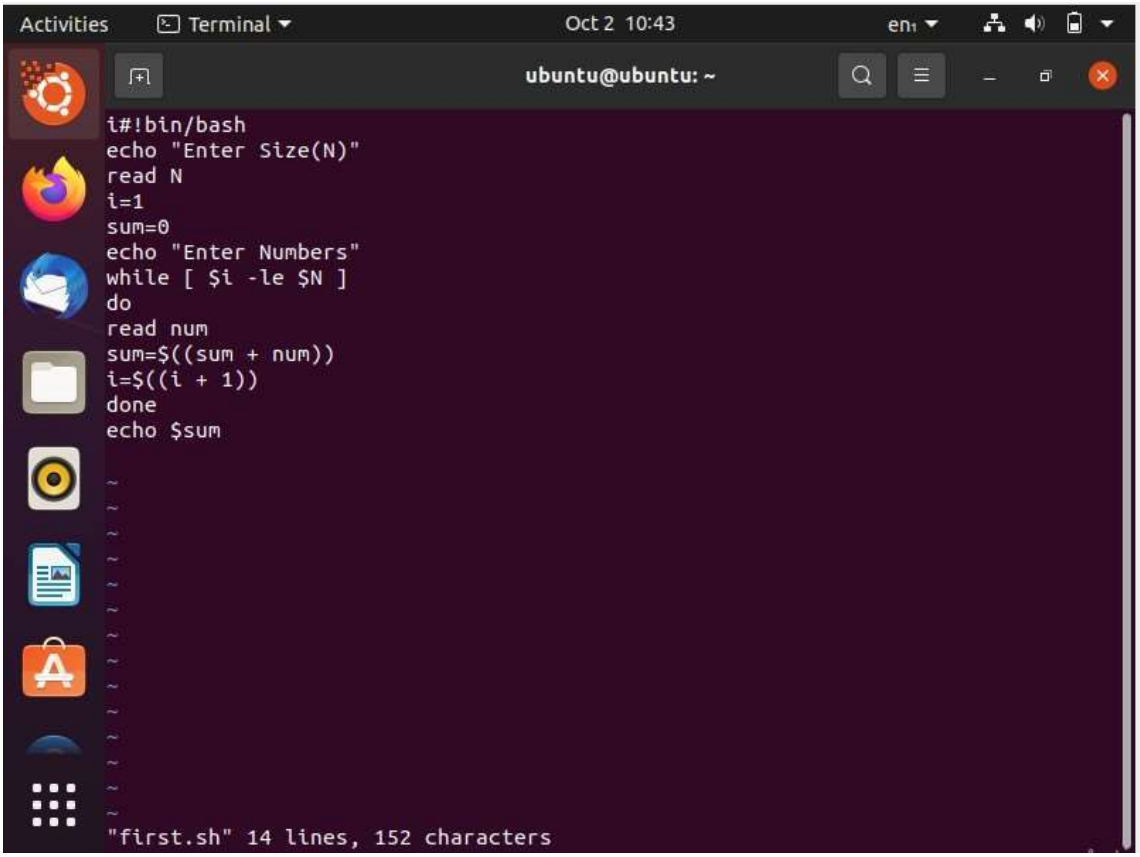




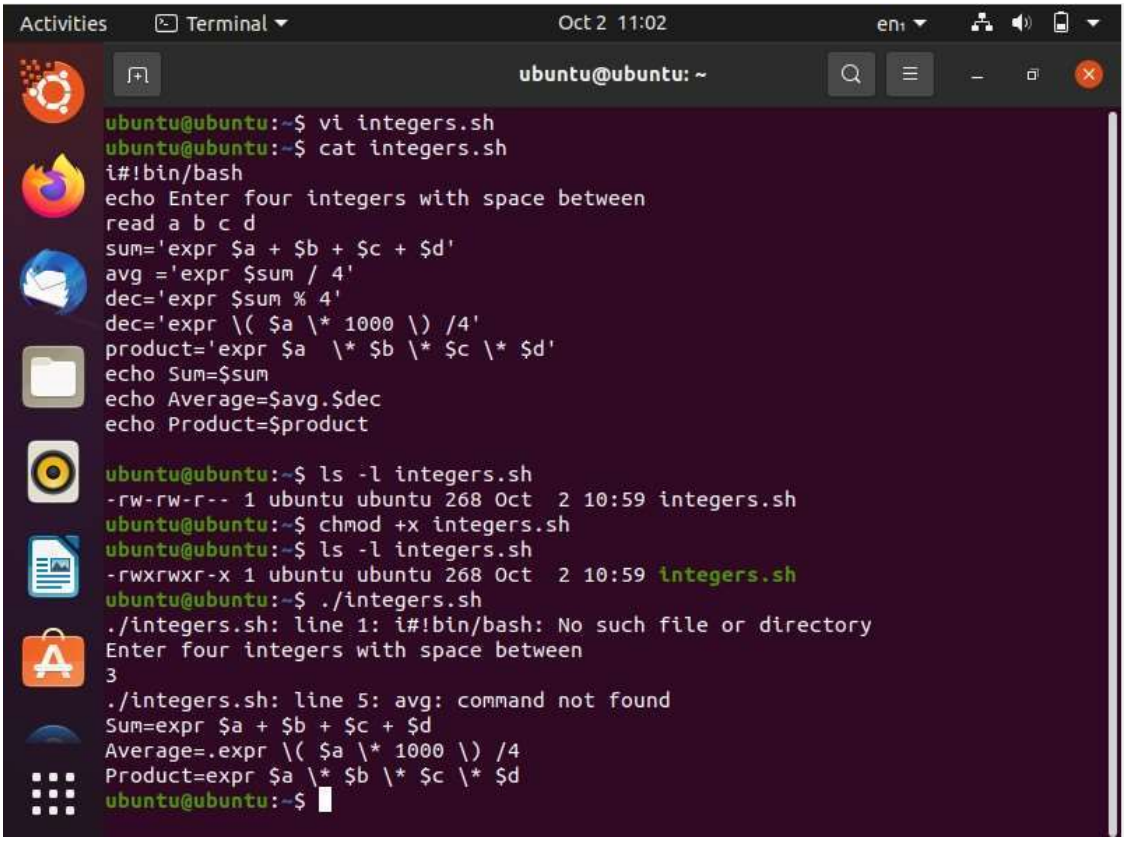
8. Write a shell script to find sum of first 10 numbers.

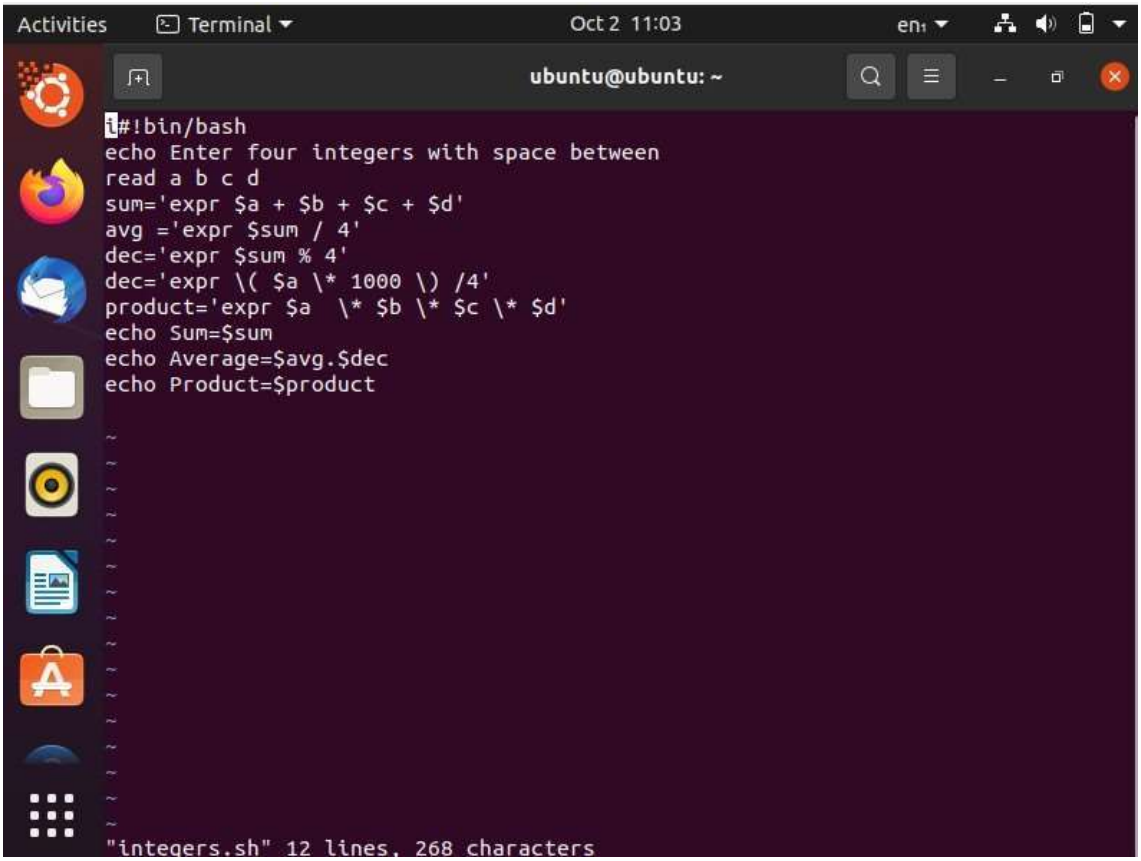

Activities
Terminal
Oct 2 10:42
en
ubuntu@ubuntu: ~
ubuntu@ubuntu:~$ vi first.sh
ubuntu@ubuntu:~$ cat first.sh
i#!bin/bash
echo "Enter Size(N)"
read N
i=1
sum=0
echo "Enter Numbers"
while [$i -le $N]
do
read num
sum=$((sum + num))
i=$((i + 1))
done
echo $sum
ubuntu@ubuntu:~$ ls -l first.sh
-rw-rw-r-- 1 ubuntu ubuntu 152 Oct 2 10:40 first.sh
ubuntu@ubuntu:~$ chmod +x first.sh
ubuntu@ubuntu:~$ ls -l first.sh
-rwxrwxr-x 1 ubuntu ubuntu 152 Oct 2 10:40 first.sh
ubuntu@ubuntu:~$ ./first.sh
./first.sh: line 1: i#!bin/bash: No such file or directory
Enter Size(N)
10
Enter Numbers
1
2
3


Activities
Terminal
Oct 2 10:42
en
ubuntu@ubuntu: ~
do
read num
sum=$((sum + num))
i=$((i + 1))
done
echo $sum
ubuntu@ubuntu:~$ ls -l first.sh
-rw-rw-r-- 1 ubuntu ubuntu 152 Oct 2 10:40 first.sh
ubuntu@ubuntu:~$ chmod +x first.sh
ubuntu@ubuntu:~$ ls -l first.sh
-rwxrwxr-x 1 ubuntu ubuntu 152 Oct 2 10:40 first.sh
ubuntu@ubuntu:~$ ./first.sh
./first.sh: line 1: i#!bin/bash: No such file or directory
Enter Size(N)
10
Enter Numbers
1
2
3
4
5
6
7
8
9
10
55
ubuntu@ubuntu:~$

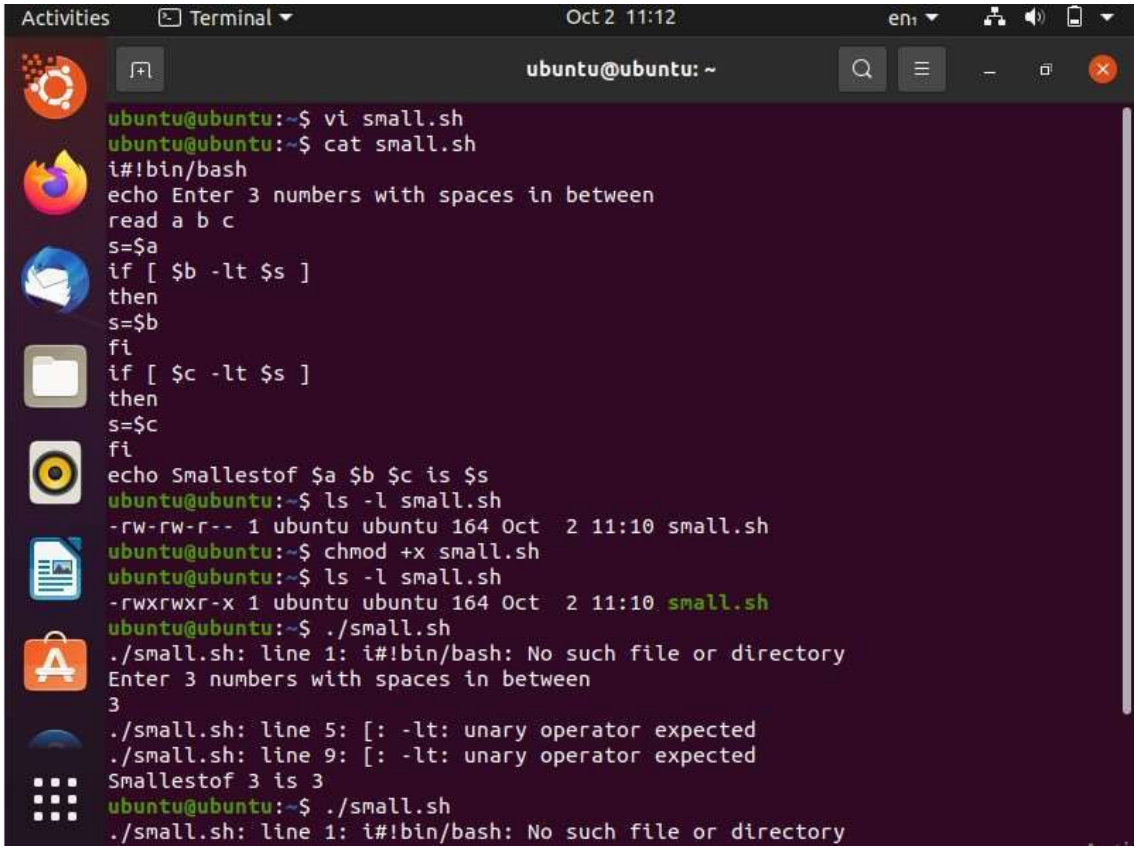


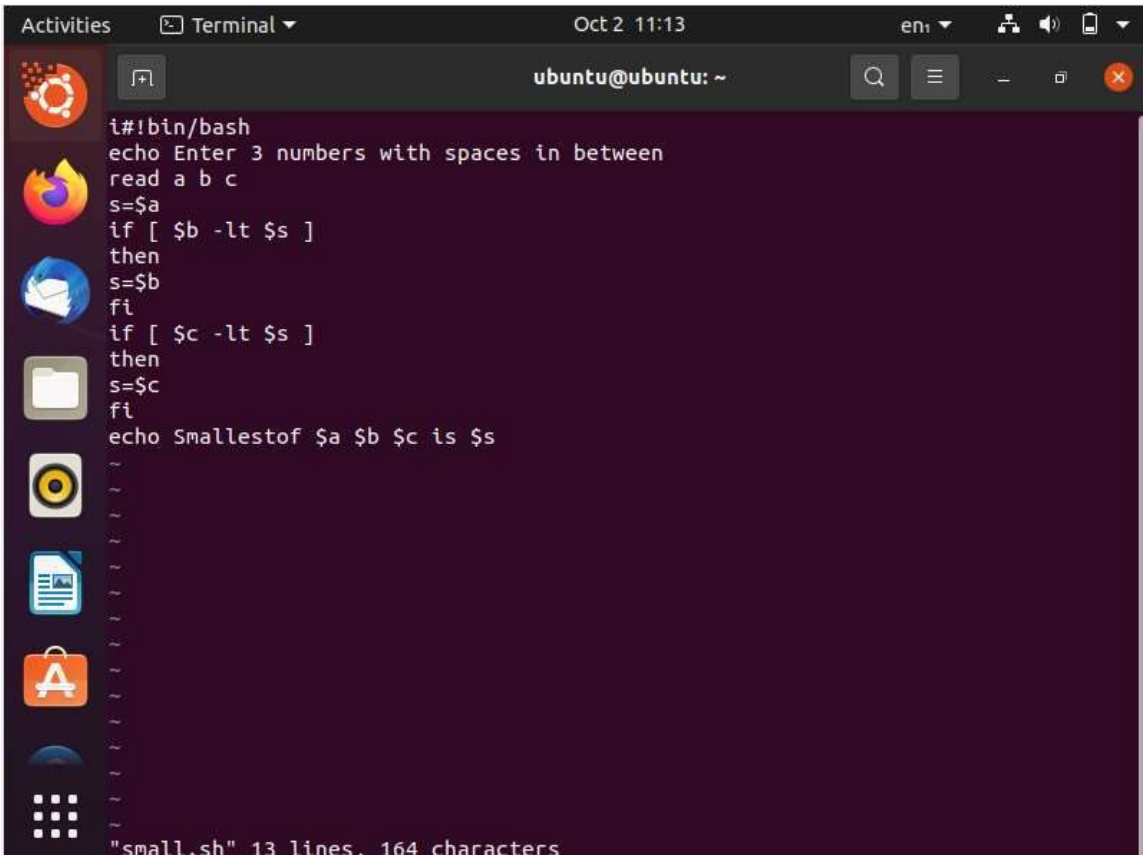
9. **Write a shell script to find the sum, average and the product of the four integers entered.**


Activities
Terminal
Oct 2 11:02
en
ubuntu@ubuntu: ~
ubuntu@ubuntu:~$ vi integers.sh
ubuntu@ubuntu:~$ cat integers.sh
i#!bin/bash
echo Enter four integers with space between
read a b c d
sum='expr $a + $b + $c + $d'
avg ='expr $sum / 4'
dec='expr $sum % 4'
dec='expr \($a * 1000 \) /4'
product='expr $a * $b * $c * $d'
echo Sum=$sum
echo Average=$avg.$dec
echo Product=$product
ubuntu@ubuntu:~$ ls -l integers.sh
-rw-rw-r-- 1 ubuntu ubuntu 268 Oct 2 10:59 integers.sh
ubuntu@ubuntu:~$ chmod +x integers.sh
ubuntu@ubuntu:~$ ls -l integers.sh
-rwxrwxr-x 1 ubuntu ubuntu 268 Oct 2 10:59 integers.sh
ubuntu@ubuntu:~$ ./integers.sh
./integers.sh: line 1: i#!bin/bash: No such file or directory
Enter four integers with space between
3
./integers.sh: line 5: avg: command not found
Sum=expr $a + $b + $c + $d
Average=.expr \($a * 1000 \) /4
Product=expr $a * $b * $c * $d
ubuntu@ubuntu:~$

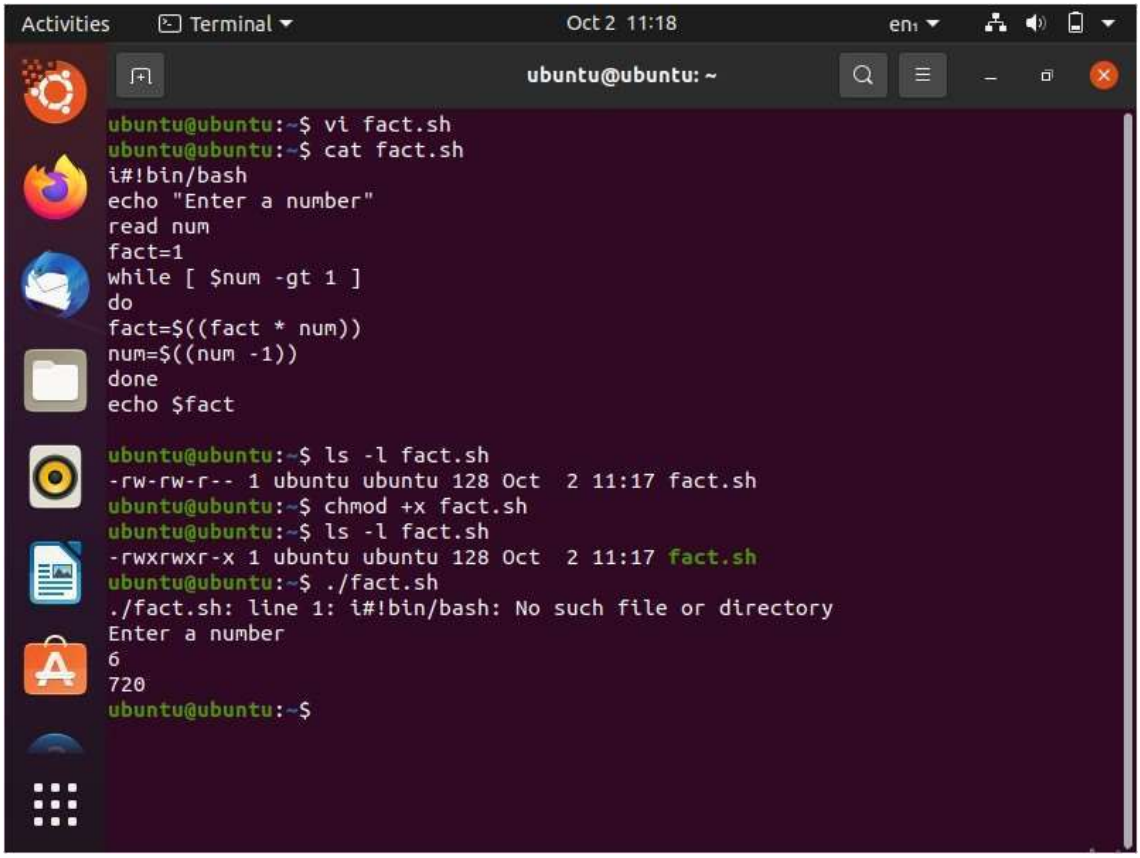


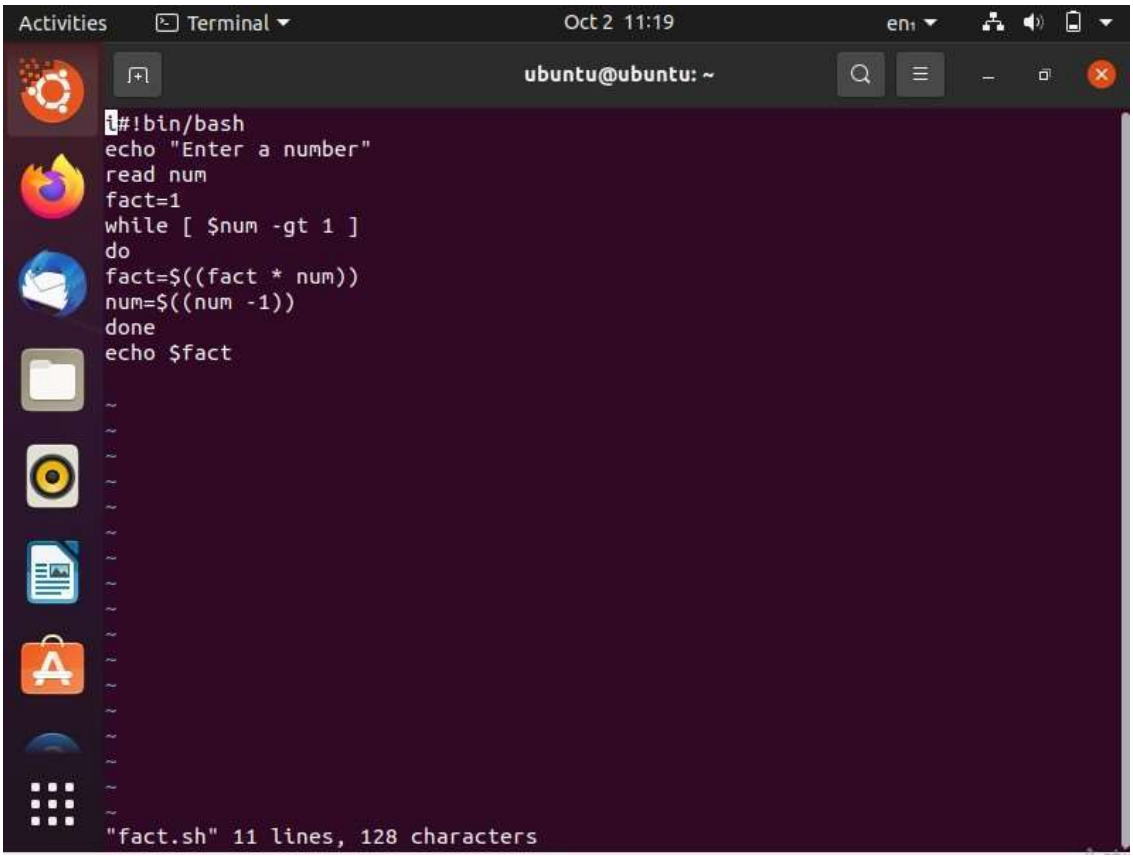
10. Write a shell program to find the smallest of three numbers.


Activities
Terminal
Oct 2 11:12
en
ubuntu@ubuntu: ~
ubuntu@ubuntu:~$ vi small.sh
ubuntu@ubuntu:~$ cat small.sh
i#!bin/bash
echo Enter 3 numbers with spaces in between
read a b c
s=$a
if [$b -lt $s]
then
s=$b
fi
if [$c -lt $s]
then
s=$c
fi
echo Smallestof $a $b $c is $s
ubuntu@ubuntu:~$ ls -l small.sh
-rw-rw-r-- 1 ubuntu ubuntu 164 Oct 2 11:10 small.sh
ubuntu@ubuntu:~$ chmod +x small.sh
ubuntu@ubuntu:~$ ls -l small.sh
-rwxrwxr-x 1 ubuntu ubuntu 164 Oct 2 11:10 small.sh
ubuntu@ubuntu:~$ ./small.sh
./small.sh: line 1: i#!bin/bash: No such file or directory
Enter 3 numbers with spaces in between
3
./small.sh: line 5: [: -lt: unary operator expected
./small.sh: line 9: [: -lt: unary operator expected
Smallestof 3 is 3
ubuntu@ubuntu:~$ ./small.sh
./small.sh: line 1: i#!bin/bash: No such file or directory

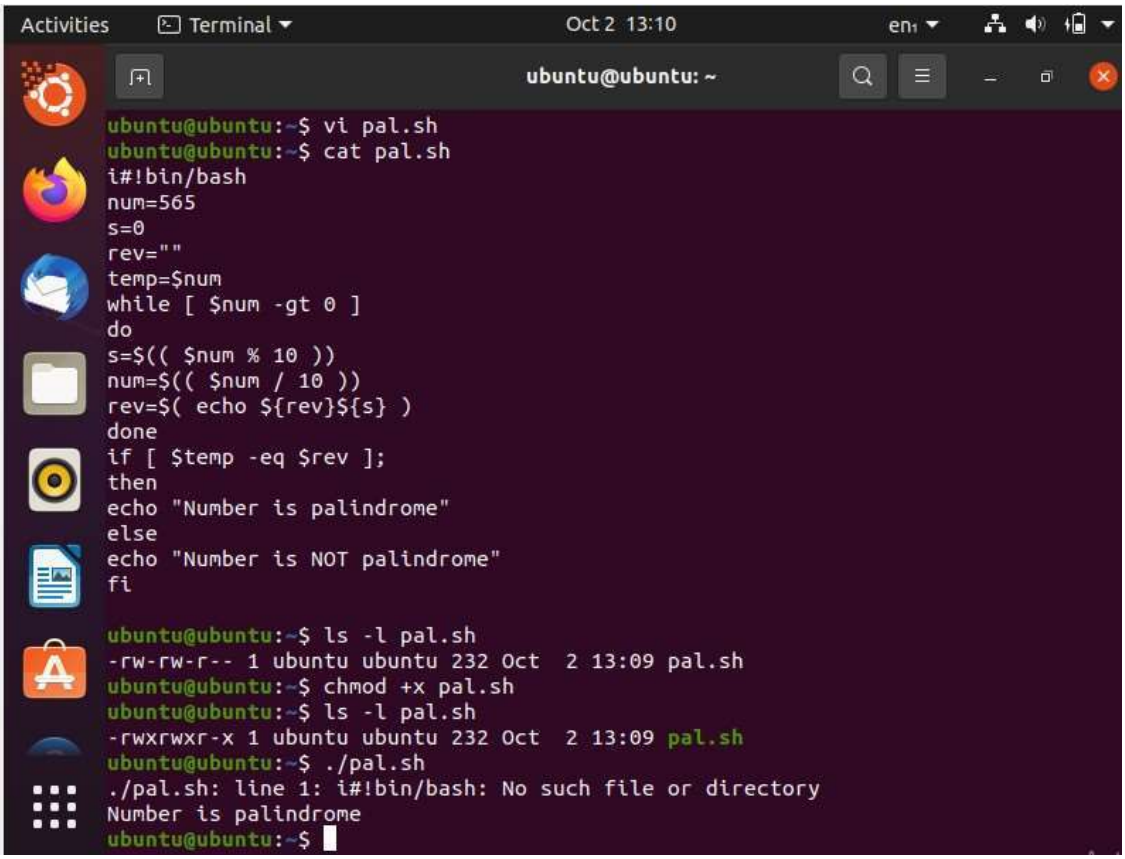


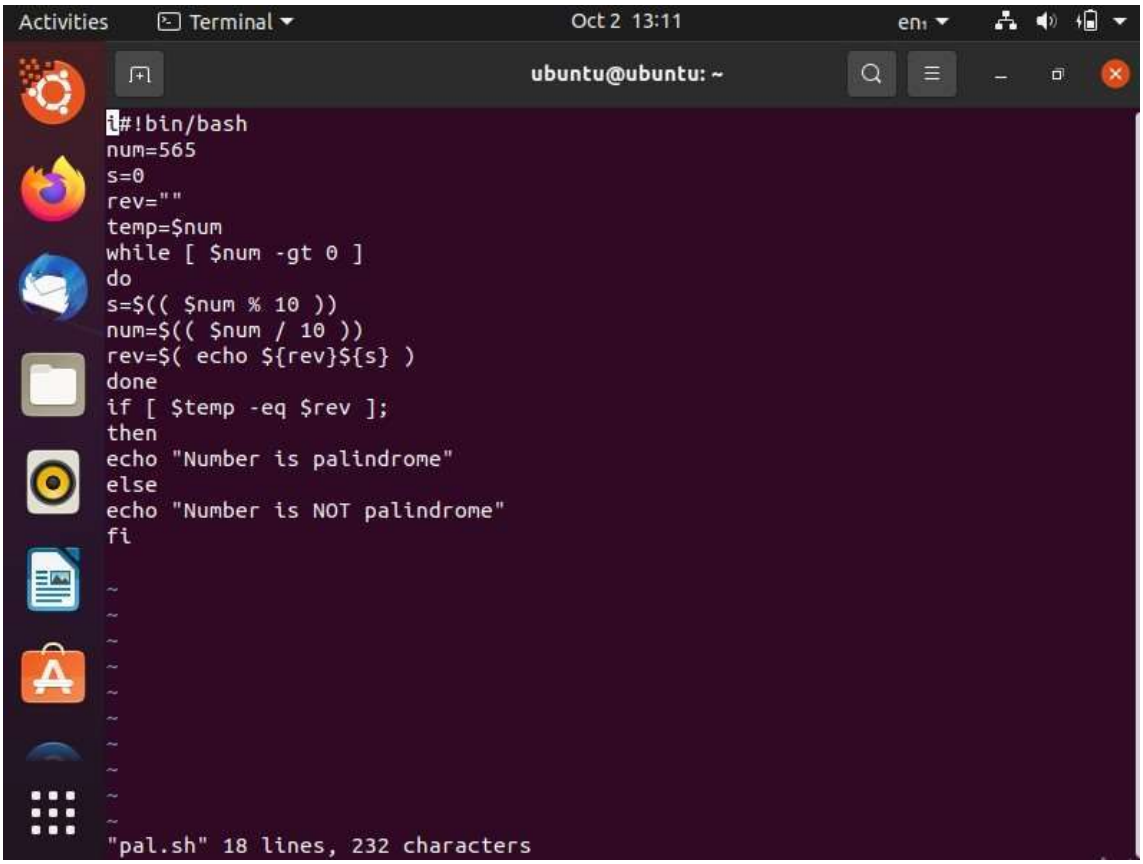
11. Write a shell program to find factorial of given number.


Activities
Terminal
Oct 2 11:18
en
ubuntu@ubuntu: ~
ubuntu@ubuntu:~$ vi fact.sh
ubuntu@ubuntu:~$ cat fact.sh
i#!bin/bash
echo "Enter a number"
read num
fact=1
while [$num -gt 1]
do
fact=$((fact * num))
num=$((num -1))
done
echo $fact
ubuntu@ubuntu:~$ ls -l fact.sh
-rw-rw-r-- 1 ubuntu ubuntu 128 Oct 2 11:17 fact.sh
ubuntu@ubuntu:~$ chmod +x fact.sh
ubuntu@ubuntu:~$ ls -l fact.sh
-rwxrwxr-x 1 ubuntu ubuntu 128 Oct 2 11:17 fact.sh
ubuntu@ubuntu:~$ ./fact.sh
./fact.sh: line 1: i#!bin/bash: No such file or directory
Enter a number
6
720
ubuntu@ubuntu:~$

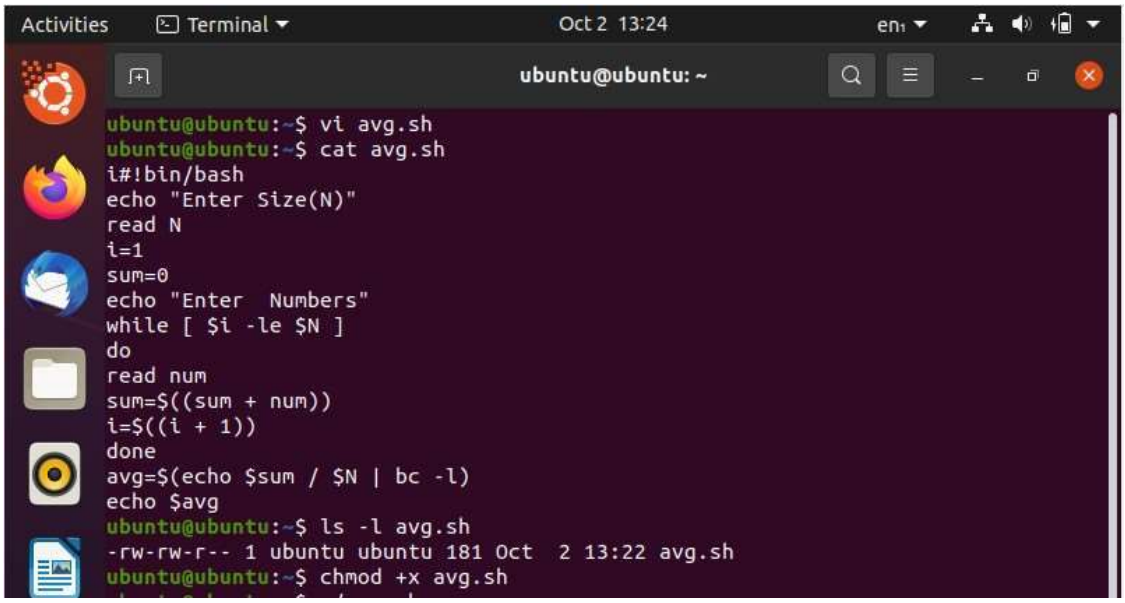

Activities
Terminal
Oct 2 11:19
en
ubuntu@ubuntu: ~
i#!bin/bash
echo "Enter a number"
read num
fact=1
while [$num -gt 1]
do
fact=$((fact * num))
num=$((num -1))
done
echo $fact
"fact.sh" 11 lines, 128 characters

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

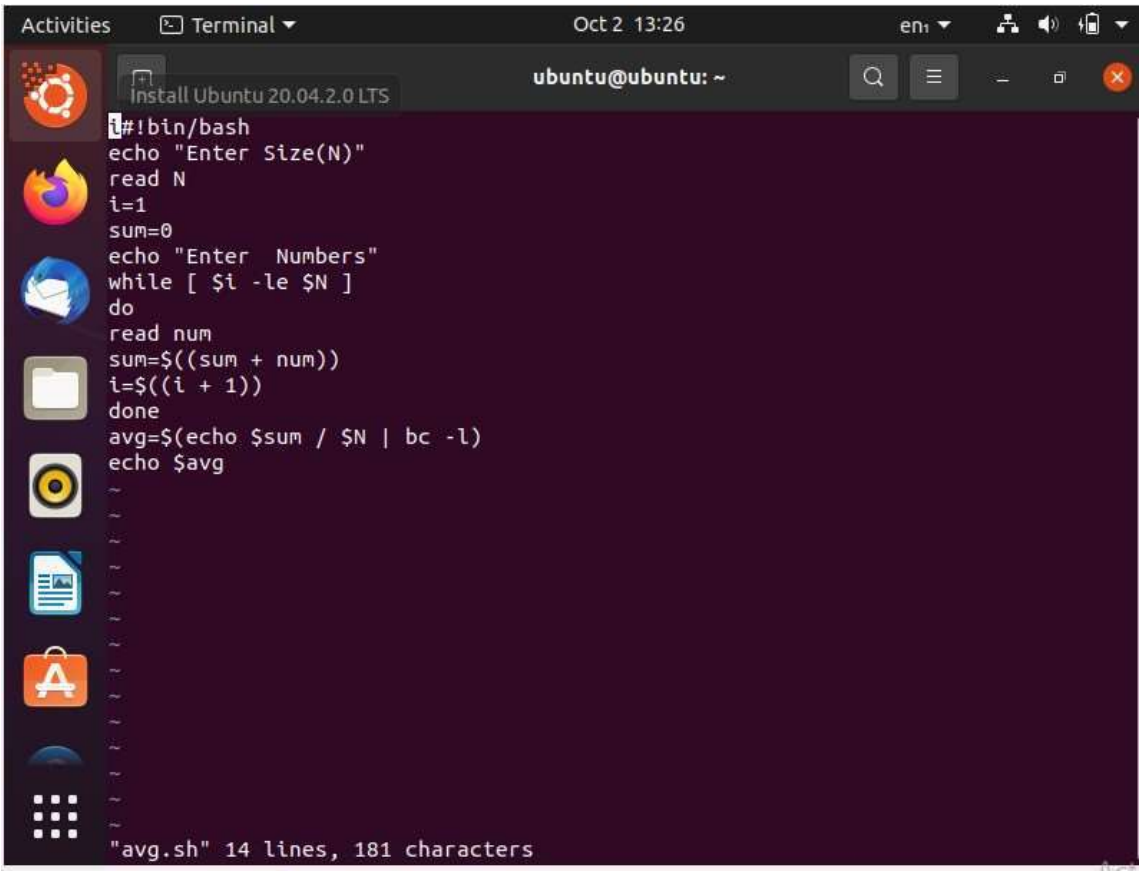




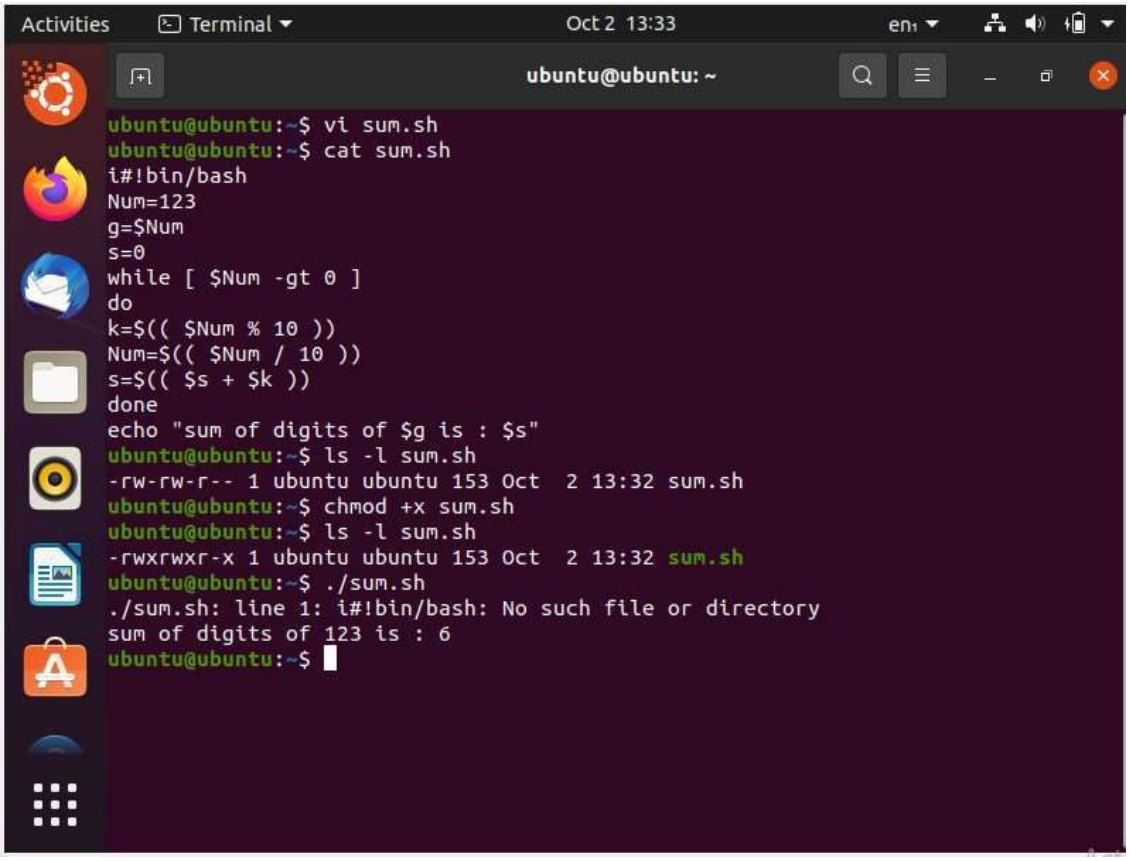
13. **Write a shell script to find the average of the numbers entered in command line.**

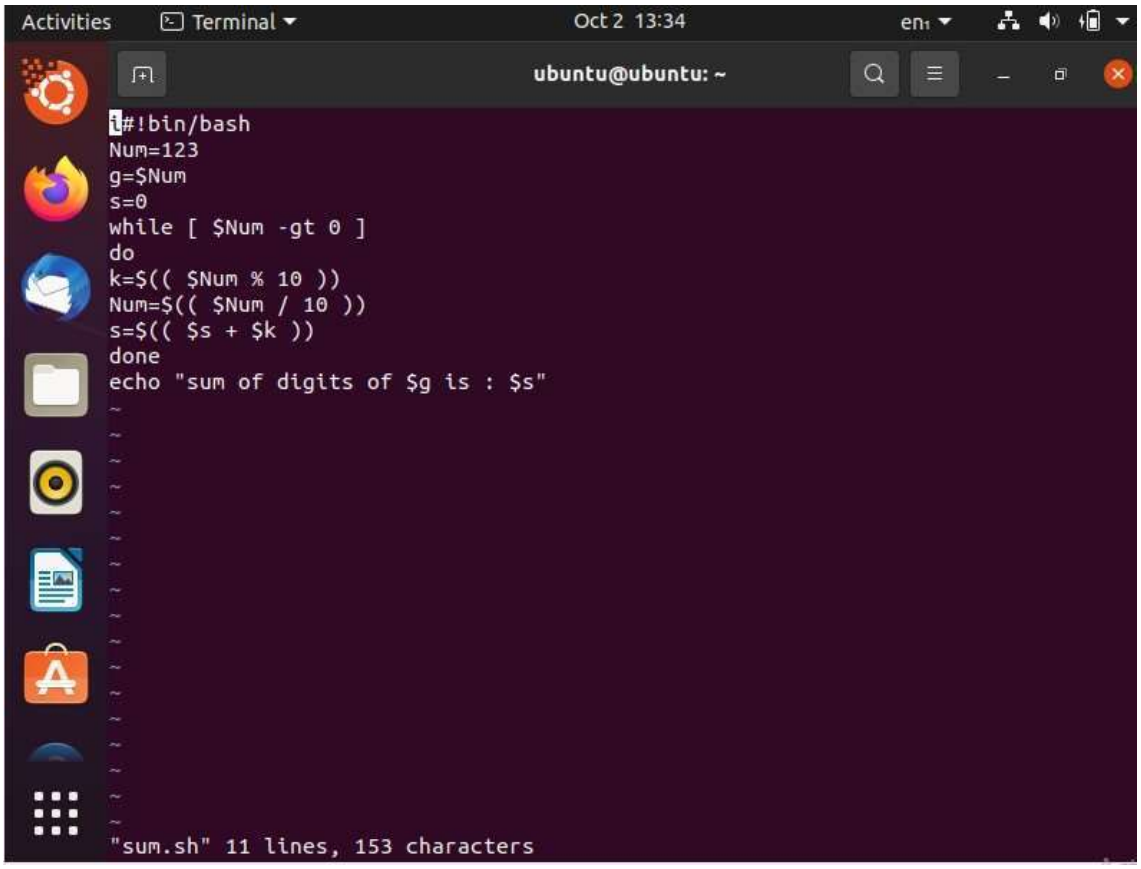


```
ubuntu@ubuntu:~$ ./avg.sh
./avg.sh: line 1: i#!bin/bash: No such file or directory
Enter Size(N)
3
Enter  Numbers
2
4
5
3.6666666666666666666
ubuntu@ubuntu:~$
```

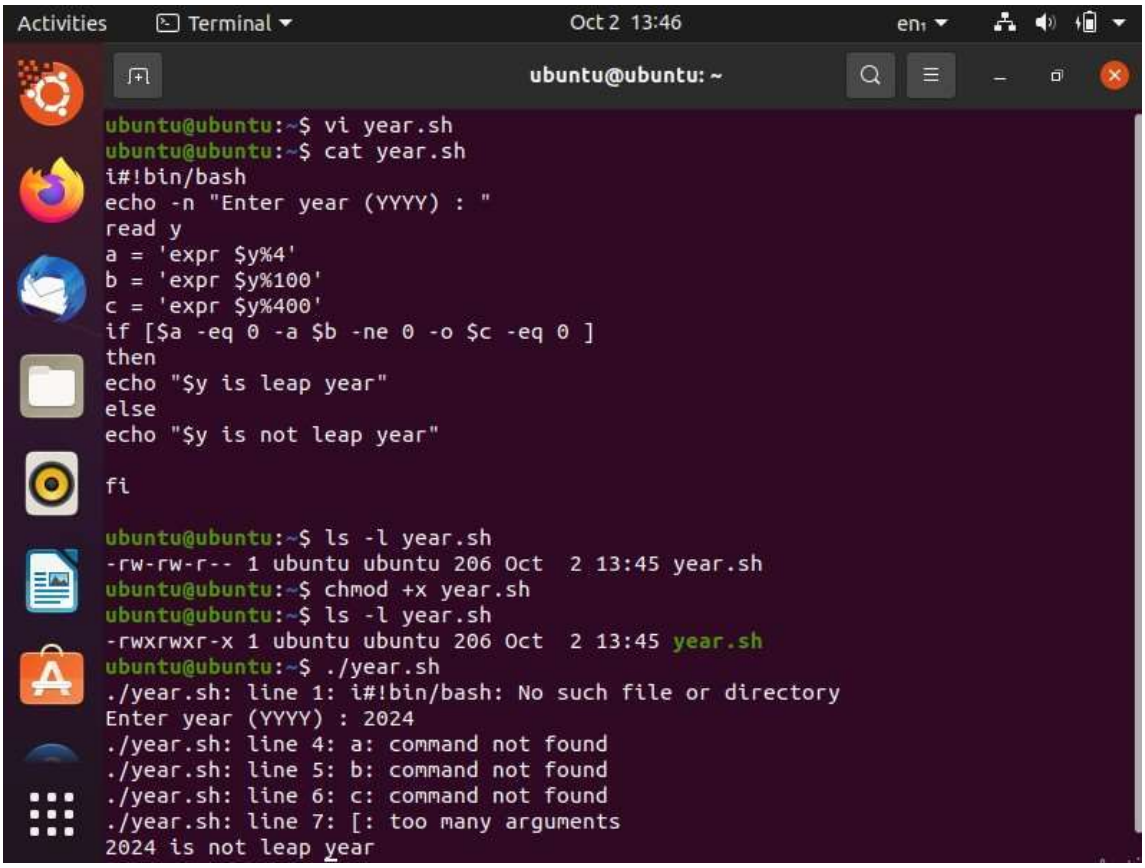


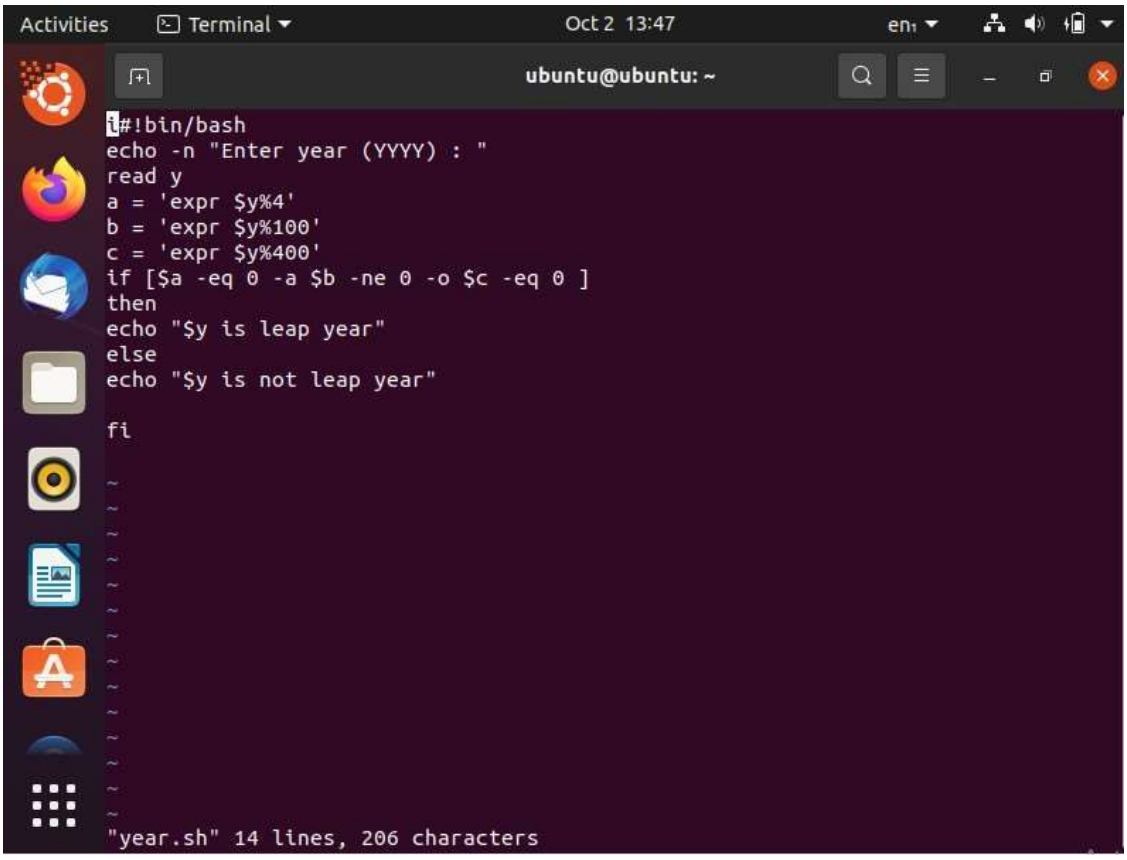
14. Write a shell program to find the sum of all the digits in a number.


Activities
Terminal
Oct 2 13:33
en1
ubuntu@ubuntu: ~
ubuntu@ubuntu:~$ vi sum.sh
ubuntu@ubuntu:~$ cat sum.sh
i#!bin/bash
Num=123
g=$Num
s=0
while [$Num -gt 0]
do
k=$(($Num % 10))
Num=$(($Num / 10))
s=$(($s + $k))
done
echo "sum of digits of $g is : $s"
ubuntu@ubuntu:~$ ls -l sum.sh
-rw-rw-r-- 1 ubuntu ubuntu 153 Oct 2 13:32 sum.sh
ubuntu@ubuntu:~$ chmod +x sum.sh
ubuntu@ubuntu:~$ ls -l sum.sh
-rwxrwxr-x 1 ubuntu ubuntu 153 Oct 2 13:32 sum.sh
ubuntu@ubuntu:~$ ./sum.sh
./sum.sh: line 1: i#!bin/bash: No such file or directory
sum of digits of 123 is : 6
ubuntu@ubuntu:~$



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


Activities
Terminal
Oct 2 13:46
en1
ubuntu@ubuntu: ~
ubuntu@ubuntu:~$ vi year.sh
ubuntu@ubuntu:~$ cat year.sh
i#!bin/bash
echo -n "Enter year (YYYY) : "
read y
a = 'expr $y%4'
b = 'expr $y%100'
c = 'expr $y%400'
if [$a -eq 0 -a $b -ne 0 -o $c -eq 0]
then
echo "$y is leap year"
else
echo "$y is not leap year"
fi
ubuntu@ubuntu:~$ ls -l year.sh
-rw-rw-r-- 1 ubuntu ubuntu 206 Oct 2 13:45 year.sh
ubuntu@ubuntu:~$ chmod +x year.sh
ubuntu@ubuntu:~$ ls -l year.sh
-rwxrwxr-x 1 ubuntu ubuntu 206 Oct 2 13:45 year.sh
ubuntu@ubuntu:~$ ./year.sh
./year.sh: line 1: i#!bin/bash: No such file or directory
Enter year (YYYY) : 2024
./year.sh: line 4: a: command not found
./year.sh: line 5: b: command not found
./year.sh: line 6: c: command not found
./year.sh: line 7: [: too many arguments
2024 is not leap year


Activities
Terminal
Oct 2 13:47
en1
ubuntu@ubuntu: ~
i#!bin/bash
echo -n "Enter year (YYYY) : "
read y
a = 'expr $y%4'
b = 'expr $y%100'
c = 'expr $y%400'
if [$a -eq 0 -a $b -ne 0 -o $c -eq 0]
then
echo "$y is leap year"
else
echo "$y is not leap year"
fi
"year.sh" 14 lines, 206 characters