

DOS Lab Assignment : 2

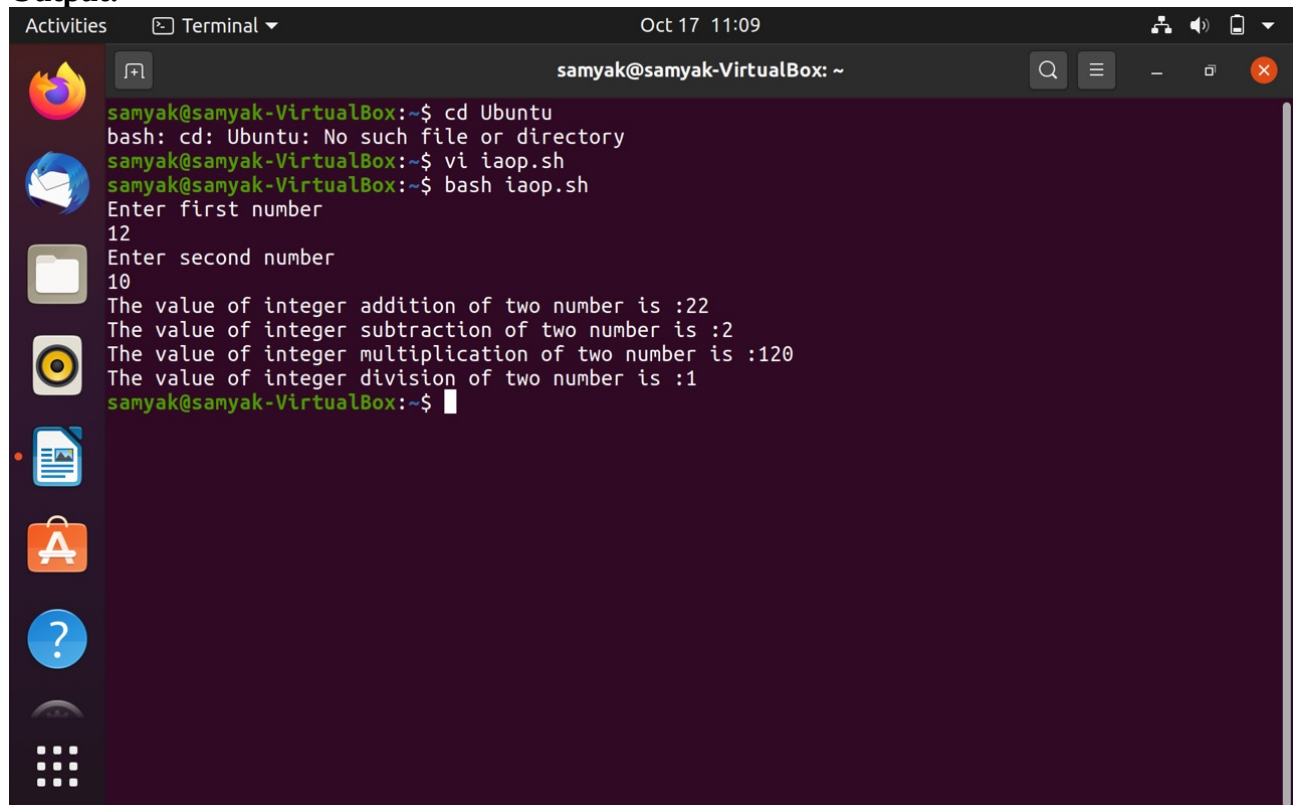
1) iaop

Shell script:

```
echo "Enter first number"
read a
echo "Enter second number"
read b
c=`expr $a + $b`
d=`expr $a - $b`
e=`expr $a \* $b`
f=`expr $a / $b`
```

```
echo "The value of integer addition of two number is :$c"
echo "The value of integer subtraction of two number is :$d"
echo "The value of integer multiplication of two number is :$e"
echo "The value of integer division of two number is :$f"
```

Output:

A screenshot of a terminal window titled "Terminal" with a timestamp of "Oct 17 11:09". The window shows the execution of a shell script named "iaop.sh". The user enters "12" for the first number and "10" for the second number. The script then outputs the results of integer addition (22), subtraction (2), multiplication (120), and division (1). The terminal window has a dark purple background and a sidebar on the left with various application icons.

```
samyak@samyak-VirtualBox:~$ cd Ubuntu
bash: cd: Ubuntu: No such file or directory
samyak@samyak-VirtualBox:~$ vi iaop.sh
samyak@samyak-VirtualBox:~$ bash iaop.sh
Enter first number
12
Enter second number
10
The value of integer addition of two number is :22
The value of integer subtraction of two number is :2
The value of integer multiplication of two number is :120
The value of integer division of two number is :1
samyak@samyak-VirtualBox:~$
```

2) faop

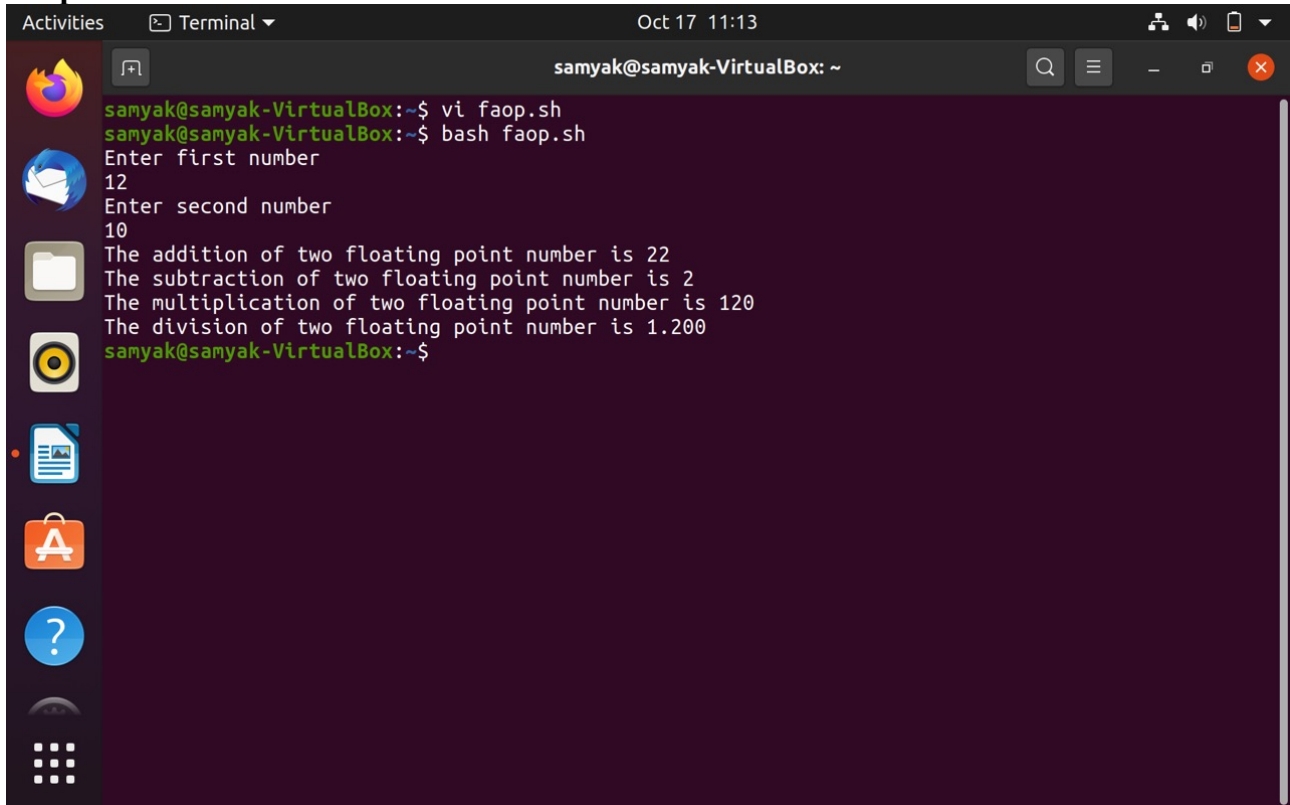
Shell script:

```
echo "Enter first number"
read a
echo "Enter second number"
read b
c=`echo "scale=3; $a + $b" |bc -l`
d=`echo "scale=3; $a - $b" |bc -l`
e=`echo "scale=3; $a * $b" |bc -l`
```

```
f=`echo "scale=3; $a / $b" |bc -l`
```

```
echo "The addition of two floating point number is $c"  
echo "The subtraction of two floating point number is $d"  
echo "The multiplication of two floating point number is $e"  
echo "The division of two floating point number is $f"
```

Output:



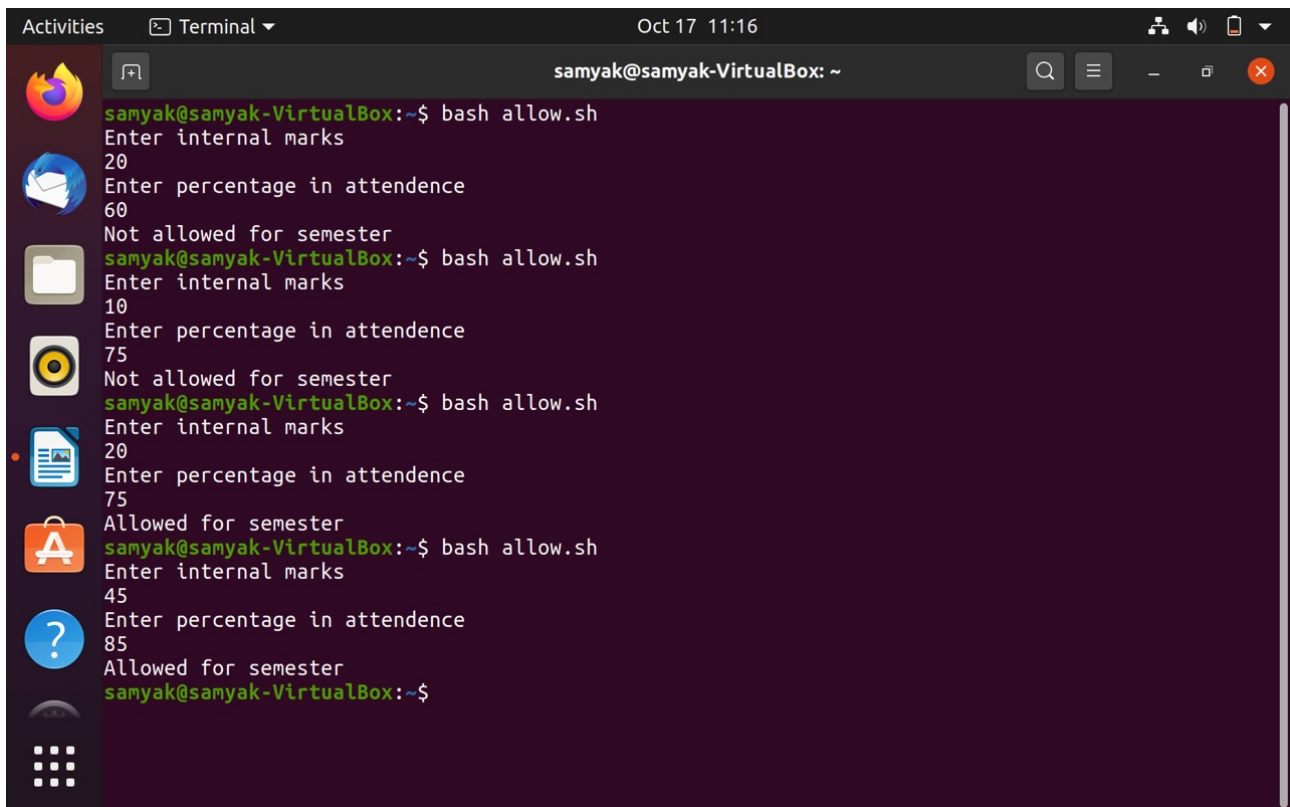
```
Oct 17 11:13  
samyak@samyak-VirtualBox: ~  
samyak@samyak-VirtualBox:~$ vi faop.sh  
samyak@samyak-VirtualBox:~$ bash faop.sh  
Enter first number  
12  
Enter second number  
10  
The addition of two floating point number is 22  
The subtraction of two floating point number is 2  
The multiplication of two floating point number is 120  
The division of two floating point number is 1.200  
samyak@samyak-VirtualBox:~$
```

3) allow

Shell script:

```
echo "Enter internal marks"  
read a  
echo "Enter percentage in attendance"  
read b  
if [ $a -ge 20 -a $b -ge 75 ]  
then  
    echo "Allowed for semester"  
else  
    echo "Not allowed for semester"  
fi
```

Output:



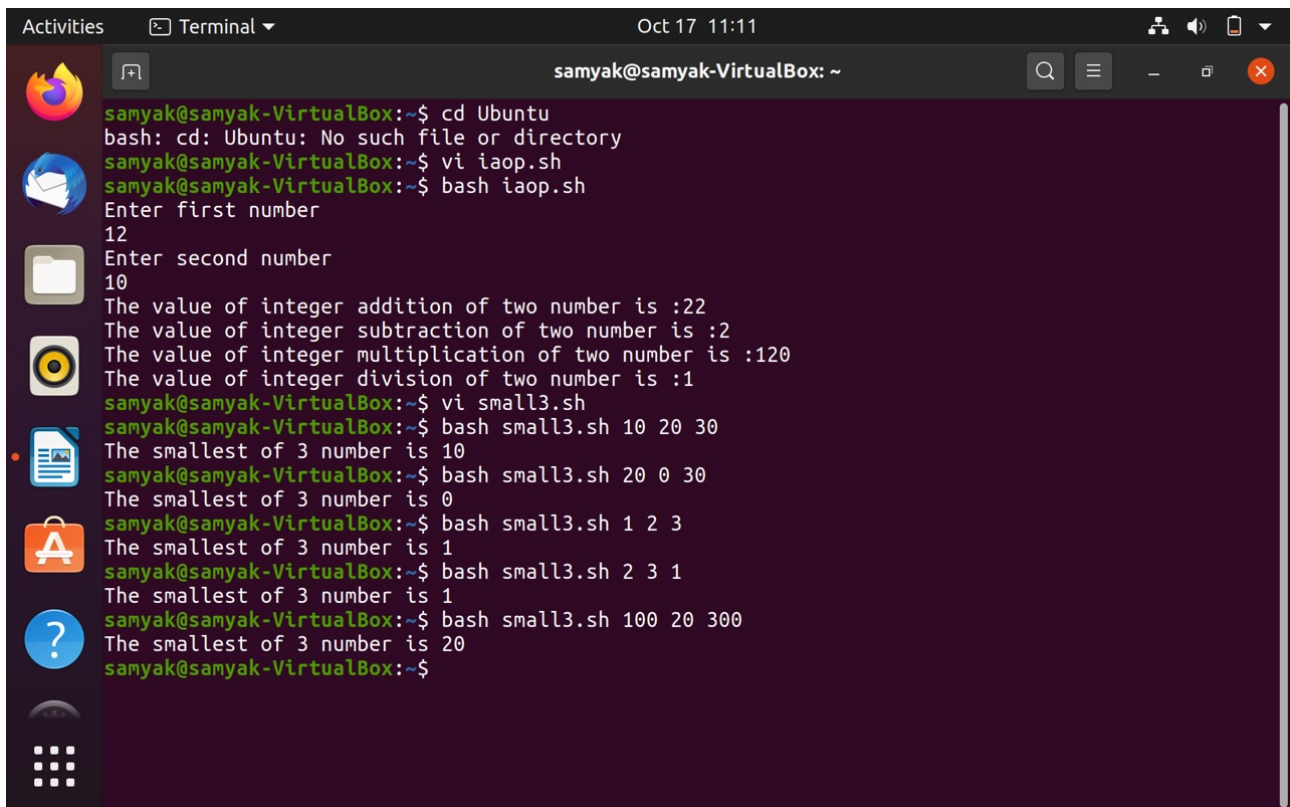
```
samyak@samyak-VirtualBox: ~  
samyak@samyak-VirtualBox:~$ bash allow.sh  
Enter internal marks  
20  
Enter percentage in attendance  
60  
Not allowed for semester  
samyak@samyak-VirtualBox:~$ bash allow.sh  
Enter internal marks  
10  
Enter percentage in attendance  
75  
Not allowed for semester  
samyak@samyak-VirtualBox:~$ bash allow.sh  
Enter internal marks  
20  
Enter percentage in attendance  
75  
Allowed for semester  
samyak@samyak-VirtualBox:~$ bash allow.sh  
Enter internal marks  
45  
Enter percentage in attendance  
85  
Allowed for semester  
samyak@samyak-VirtualBox:~$
```

4) small3

Shell Script:

```
if [ $1 -le $2 -a $1 -le $3 ]  
then  
    echo "The smallest of 3 number is $1"  
fi  
if [ $2 -le $1 -a $2 -le $3 ]  
then  
    echo "The smallest of 3 number is $2"  
elif [ $3 -le $2 -a $3 -le $1 ]  
then  
    echo "The smallest of 3 number is $3"  
fi
```

Output:



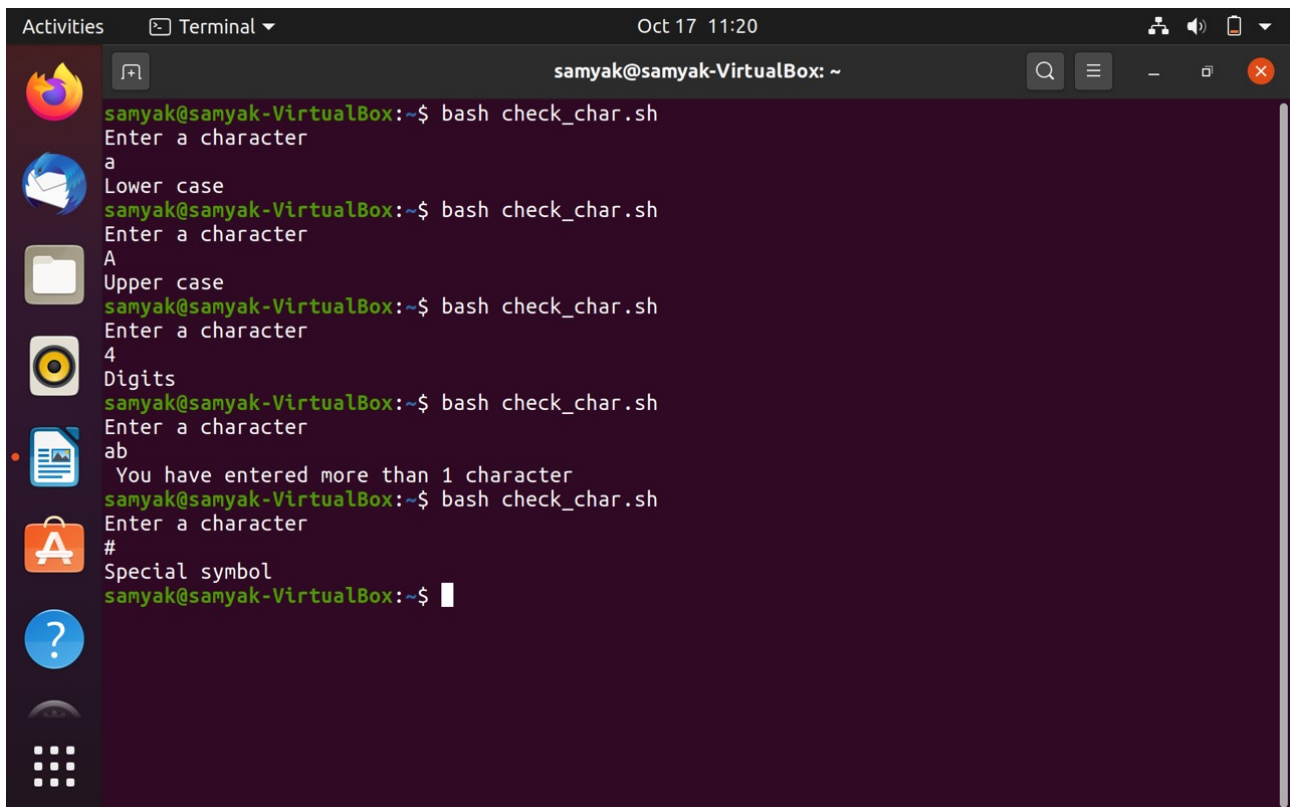
```
samyak@samyak-VirtualBox:~$ cd Ubuntu
bash: cd: Ubuntu: No such file or directory
samyak@samyak-VirtualBox:~$ vi iaop.sh
samyak@samyak-VirtualBox:~$ bash iaop.sh
Enter first number
12
Enter second number
10
The value of integer addition of two number is :22
The value of integer subtraction of two number is :2
The value of integer multiplication of two number is :120
The value of integer division of two number is :1
samyak@samyak-VirtualBox:~$ vi small3.sh
samyak@samyak-VirtualBox:~$ bash small3.sh 10 20 30
The smallest of 3 number is 10
samyak@samyak-VirtualBox:~$ bash small3.sh 20 0 30
The smallest of 3 number is 0
samyak@samyak-VirtualBox:~$ bash small3.sh 1 2 3
The smallest of 3 number is 1
samyak@samyak-VirtualBox:~$ bash small3.sh 2 3 1
The smallest of 3 number is 1
samyak@samyak-VirtualBox:~$ bash small3.sh 100 20 300
The smallest of 3 number is 20
samyak@samyak-VirtualBox:~$
```

5) check_char

Shell Script:

```
echo "Enter a character"
read a
if [[ $a == [A-Z] ]]
then
    echo "Upper case"
elif [[ $a == [a-z] ]]
then
    echo "Lower case"
elif [[ $a == [0-9] ]]
then
    echo "Digits"
elif [[ ${#a} -gt 1 ]]
then
    echo " You have entered more than 1 character"
else
    echo "Special symbol"
fi
```

Output:



```
samyak@samyak-VirtualBox: ~  
samyak@samyak-VirtualBox:~$ bash check_char.sh  
Enter a character  
a  
Lower case  
samyak@samyak-VirtualBox:~$ bash check_char.sh  
Enter a character  
A  
Upper case  
samyak@samyak-VirtualBox:~$ bash check_char.sh  
Enter a character  
4  
Digits  
samyak@samyak-VirtualBox:~$ bash check_char.sh  
Enter a character  
ab  
You have entered more than 1 character  
samyak@samyak-VirtualBox:~$ bash check_char.sh  
Enter a character  
#  
Special symbol  
samyak@samyak-VirtualBox:~$
```

6) class_time

Shell Script:

```
echo "Enter a day to know the class time"  
read a  
case $a in  
    Monday|Mon|monday|mon)  
        echo "DOS class from 10:00AM-11:00AM";  
        ;;  
    Thursday|Thu|thursday|thu)  
        echo "DOS class from 12:00PM-1:00PM";  
        ;;  
    Friday|Fri|friday|fri)  
        echo "DOS class from 1:00PM-2:00PM";  
        ;;  
    *)  
        echo "No DOS class"  
    esac
```

Output:

```
Activities Terminal Oct 17 11:19
samyak@samyak-VirtualBox: ~
samyak@samyak-VirtualBox:~$ bash class_time.sh
Enter a day to know the class time
mon
DOS class from 10:00AM-11:00AM
samyak@samyak-VirtualBox:~$ bash class_time.sh
Enter a day to know the class time
Mon
DOS class from 10:00AM-11:00AM
samyak@samyak-VirtualBox:~$ bash class_time.sh
Enter a day to know the class time
Saturday
DOS class from 8:00AM-10:00AM
samyak@samyak-VirtualBox:~$ bash class_time.sh
Enter a day to know the class time
tue
No DOS class
samyak@samyak-VirtualBox:~$ bash class_time.sh
Enter a day to know the class time
friday
DOS class from 1:00PM-2:00PM
samyak@samyak-VirtualBox:~$
```