```
meera1120@meera1120-VirtualBox:~/Desktop/nsa/exc5$ nano file.sh
meera1120@meera1120-VirtualBox:~/Desktop/nsa/exc5$ cat file.sh
#! /bin/bash
read -p "enter a file name = " n
if  test -f  $n
then
        echo "file"
elif  test -d $n
then
        echo "directory"
else
        echo "not exist"
fi
meera1120@meera1120-VirtualBox:~/Desktop/nsa/exc5$ bash file.sh
enter a file name = file.sc
not exist
meera1120@meera1120-VirtualBox:~/Desktop/nsa/exc5$ bash file.sh
enter a file name = next
directory
meera1120@meera1120-VirtualBox:~/Desktop/nsa/exc5$ bash file.sh
enter a file name = file.sh
file
meera1120@meera1120-VirtualBox:~/Desktop/nsa/exc5$
```

```
meera1120@meera1120-VirtualBox:~/Desktop/nsa/exc5$ nano file1.sh
meera1120@meera1120-VirtualBox:~/Desktop/nsa/exc5$ cat file1.sh
#! /bin/bash
read  -p "basic salary= " b
if [[ $b <  1500 ]]
then
        hra=`expr $b \* 10 / 100`
        da=`expr $b \* 90 / 100`
        b=`expr $hra + $da + $b`
        echo  "gross salary = $b"
else
        hra=500
        da=`expr $b \*  98 / 100`
        b=`expr $hra + $da + $b`
        echo "gross salary = $b"
fi
meera1120@meera1120-VirtualBox:~/Desktop/nsa/exc5$ bash file1.sh
basic salary= 1800
gross salary = 4064
meera1120@meera1120-VirtualBox:~/Desktop/nsa/exc5$ bash file1.sh
basic salary= 1300
gross salary = 2600
meera1120@meera1120-VirtualBox:~/Desktop/nsa/exc5$
```

```
meera1120@meera1120-VirtualBox:~/Desktop/nsa/exc5$ nano file2.sh
meera1120@meera1120-VirtualBox:~/Desktop/nsa/exc5$ cat file2.sh
#! /bin/bash
read -p "enter first number = " n1
read -p "enter second number =" n2
power=`expr $n1^$n2 | bc`
echo "power = $power"
meera1120@meera1120-VirtualBox:~/Desktop/nsa/exc5$ bash  file2.sh
enter first number = 2
enter second number =3
power = 8
meera1120@meera1120-VirtualBox:~/Desktop/nsa/exc5$
```

Firefox Web Browser

```
meera1120@meera1120-VirtualBox:~/Desktop/nsa/exc5$ nano file3.sh
meera1120@meera1120-VirtualBox:~/Desktop/nsa/exc5$ cat file3.sh
#! /bin/bash
read -p "enter  first file = " f1
read -p "enter second file = " f2
if  cmp $f1 $f2
then
        echo "file are same "
        rm f2
else
        echo "file are not same"
fi

meera1120@meera1120-VirtualBox:~/Desktop/nsa/exc5$ bash file3.sh
enter  first file = file.sh
enter second file = file1.sh
file.sh file1.sh differ: byte 19, line 2
file are not same
meera1120@meera1120-VirtualBox:~/Desktop/nsa/exc5$
```

```
meera1120@meera1120-VirtualBox:~/Desktop/nsa/exc5$ nano file4.sh
meera1120@meera1120-VirtualBox:~/Desktop/nsa/exc5$ cat file4.sh
#! /bin/bash
echo "1.addition"
echo "2.substraction"
echo "3.multiplication"
echo "4.division"
read -p "enter the first value =  " v1
read -p "enter the second value = " v2
read -p "enter your choice = " ch
case $ch in
        1) add=`expr $v1 + $v2`
                echo "addition = $add ";;
        2) sub=`expr $v1 - $v2`
                echo "substraction = $sub";;
        3)mul=`expr $v1 \* $v2`
                echo "multiplication = $mul";;
        4)div=`expr $v1 / $v2`
                echo "division = $div";;
        *)echo "invalid";;
esac
meera1120@meera1120-VirtualBox:~/Desktop/nsa/exc5$ bash file4.sh
1.addition
2.substraction
3.multiplication
4.division
enter the first value =  3
enter the second value = 4
enter your choice = 1
addition = 7
meera1120@meera1120-VirtualBox:~/Desktop/nsa/exc5$
```

```
meera1120@meera1120-VirtualBox:~/Desktop/nsa/exc5$ bash file4.sh
1.addition
2.substraction
3.multiplication
4.division
enter the first value =  3
enter the second value = 4
enter your choice = 2
substraction = -1
meera1120@meera1120-VirtualBox:~/Desktop/nsa/exc5$ bash file4.sh
1.addition
2.substraction
3.multiplication
4.division
enter the first value =  4
enter the second value = 5
enter your choice = 3
multiplication = 20
meera1120@meera1120-VirtualBox:~/Desktop/nsa/exc5$ bash file4.sh
1.addition
2.substraction
3.multiplication
4.division
enter the first value =  4
enter the second value = 2
enter your choice = 4
division = 2
meera1120@meera1120-VirtualBox:~/Desktop/nsa/exc5$
```