1.

```
alen@alen:~$ cat > pgm1.sh
#! /bin/bash

echo "enter file"
read str
if test -f $str
then echo "fie exists"
elif test -d $str
then echo "directory file"
else
echo "not exists"
fi
if test -c $str
then echo "character device files"
fi
```

```
alen@alen:~$ bash pgm1.sh
enter file
Documents
directory file
alen@alen:~$ bash pgm1.sh
enter file
myfile
fie exists
```

alen@alen:~$ cat > pgm1.sh
#! /bin/bash

echo "enter file"
read str
if test -f $str
then echo "fie exists"
elif test -d $str
then echo "directory file"
else
echo "not exists"
fi
if test -c $str
then echo "character device files"
fi
alen@alen:~$ bash pgm1.sh
enter file
^C
alen@alen:~$ ls
cat Documents latest.zip myfile Pictures Templates wordpress
Desktop Downloads Music pgm1.sh Public Videos
alen@alen:~$ bash pgm1.sh
enter file
Documents
directory file
alen@alen:~$ bash pgm1.sh
enter file
myfile

fie exists

2.

```
alen@alen:~$ cat > pgm2.sh
#! /bin/bash

echo -n "Enter the basic salary:"
read sal

if [$sal -lt 1500]
then
     echo "HRA :" $((sal*10/100))
     echo "DA :" $((sal*90/100))
else [$sal -ge 1500]
         echo "HRA : RS.500"
         echo "DA :" $((sal*98/100))
fi
```

```
alen@alen:~$ bash pgm2.sh
Enter the basic salary:3000
HRA : RS.500
DA : 2940
alen@alen:~$ bash pgm2.sh
Enter the basic salary:1000
HRA : 100
DA : 900
```

alen@alen:~$ cat > pgm2.sh
#! /bin/bash

echo -n "Enter the basic salary:"
read sal

if [$sal -lt 1500]
then
**   echo "HRA :" $((sal*10/100))**
**   echo "DA :" $((sal*90/100))**
else [$sal -ge 1500]
**   echo "HRA : RS.500"**
**   echo "DA :" $((sal*98/100))**
Fi
alen@alen:~$ bash pgm2.sh
Enter the basic salary:3000
HRA : RS.500
DA : 2940
alen@alen:~$ bash pgm2.sh
Enter the basic salary:1000
HRA : 100
DA : 900

3.

```
alen@alen:~$ cat > pgm3.sh
#! /bin/bash

echo -n "Enter the base :"
read N

echo -n "Enter the power :"
read S

sq= echo $N^$S | bc
alen@alen:~$ bash pgm3.sh
Enter the base :4
Enter the power :3
64
```

alen@alen:~$ cat > pgm3.sh
#! /bin/bash

echo -n "Enter the base :"
read N

echo -n "Enter the power :"
read S

sq= echo $N^$S | bc
alen@alen:~$ bash pgm3.sh
Enter the base :4
Enter the power :3
64

4.

```
alen@alen:~$ cat > pgm4.sh
#! /bin/bash

echo -n "Enter the first file :"
read file1

echo -n "Enter the second file :"
read file2

if cmp $file1 $file2
then
       rm -i "$file2"
else
       echo "Contents of the files are not same!!!"
fi
alen@alen:~$ cat > ab.txt
ok bye
alen@alen:~$ cat > cd.txt
ok gudngt
alen@alen:~$ bash pgm4.sh
Enter the first file :ab.txt
Enter the second file :cd.txt
ab.txt cd.txt differ: byte 4, line 1
Contents of the files are not same!!!
```

alen@alen:~$ cat > pgm4.sh
#! /bin/bash

echo -n "Enter the first file :"
read file1

echo -n "Enter the second file :"
read file2

if cmp $file1 $file2
then
rm -i "$file2"
else
echo "Contents of the files are not same!!!"
fi
alen@alen:~$ cat > ab.txt
ok bye
alen@alen:~$ cat > cd.txt
ok gudngt
alen@alen:~$ bash pgm4.sh
Enter the first file :ab.txt
Enter the second file :cd.txt
ab.txt cd.txt differ: byte 4, line 1
Contents of the files are not same!!!

5.

```
alen@alen:~$ cat > pgm5.sh
#! /bin/bash

echo "Enter 2 nos :"
read a
read b

echo "Enter the choice :"
echo "1.addition"
echo "2.substraction"
echo "3,mulitiplication"
echo "4.division"
read ch

case $ch in
1)res=`echo $a + $b | bc`
;;
2)res=`echo $a - $b | bc`
;;
3)res=`echo $a \* $b | bc`
;;
4)res=`echo "scale=2; $a / $b" |bc`
;;
esac
echo "Result : $res"
```

```
alen@alen:~$ bash pgm5.sh
Enter 2 nos :
5
3
Enter the choice :
1.addition
2.substraction
3.mulitiplication
4.division
1
Result : 8
```

```
alen@alen:~$ bash pgm5.sh
Enter 2 nos :
10
20
Enter the choice :
1.addition
2.substraction
3.mulitiplication
4.division
2
Result : -10
alen@alen:~$ bash pgm5.sh
Enter 2 nos :
4
2
Enter the choice :
1.addition
2.substraction
3.mulitiplication
4.division
3
Result : 8
```

```
alen@alen:~$ bash pgm5.sh
Enter 2 nos :
20
5
Enter the choice :
1.addition
2.substraction
3.mulitiplication
4.division
4
Result : 4.00
```

```
alen@alen:~$ cat > pgm5.sh
#! /bin/bash

echo "Enter 2 nos :"
read a
read b

echo "Enter the choice :"
echo "1.addition"
echo "2.substraction"
echo "3,mulitiplication"
echo "4.division"
read ch

case $ch in
1)res=`echo $a + $b | bc`
;;
2)res=`echo $a - $b | bc`
;;
3)res=`echo $a \* $b | bc`
;;
```

```
4)res=`echo "scale=2; $a / $b" |bc`
;;
esac
echo "Result : $res"
alen@alen:~$ vim pgm5.sh
alen@alen:~$ bash pgm5.sh
Enter 2 nos :
5
3
Enter the choice :
1.addition
2.substraction
3.mulitiplication
4.division
1
Result : 8
alen@alen:~$ bash pgm5.sh
Enter 2 nos :
10
20
Enter the choice :
1.addition
2.substraction
3.mulitiplication
4.division
2
Result : -10
alen@alen:~$ bash pgm5.sh
Enter 2 nos :
4
2
Enter the choice :
1.addition
2.substraction
3.mulitiplication
4.division
3
Result : 8
alen@alen:~$ bash pgm5.sh
Enter 2 nos :
20
5
Enter the choice :
1.addition
2.substraction
3.mulitiplication
4.division
4
```

Result : 4.00