1.Write a shell script to find that the number entered by user is positive or negative(using if)

Ans:

**Input:**

**prac1**

echo "Enter a Number:"

read n

if [ $n -gt 0 ];then

     echo "Number is positive"

else

     if [ $n -eq 0 ];then

         echo "Number is Zero!"

     else

         echo "Number is Negative!!"

     fi

fi

**Output:**

cs17@cs17-desktop:~$ chmod u+x prac1

cs17@cs17-desktop:~$ ./prac1

Enter a Number:

2

Number is positive

-1

Number is Negative!!"

2.Write a shell script to find following.

X=a+b+c

Y=a\*b\*c

Ans:

**Input:**

**prac2**

echo enter a b c values

read a b c

x=`expr $a + $b + $c`

y=`expr $a \\* $b \\* $c`

echo x=$x

echo y=$y

**Output:**

enter a b c values1 2 3

x=6

y=6

3.Write and execute a shell script to read marks in five subjects and find the percentage **per** Also give the grades as follows:

1. If the **per < 35 then GRADE = FAIL**
2. If the **35 >=per < 45 then**  **GRADE = THIRD**
3. If the **45 >=per < 60 then**  **GRADE = SECOND**
4. If the **60 >=per < 75 then**  **GRADE = FIRST**
5. If the **per >= 75 then GRADE = DISTINCTION**

**Ans:**

**Input:**

**prac2**

echo enter marks m1 m2 m3 m4 m5

read m1 m2 m3 m4 m5

sum=` expr $m1 + $m2 + $m3 + $m4 + $m5 `

y=`expr $sum \\* 100`

per=`expr $y / 500`

echo per=$per

if [ $per -lt 35 ] ; then

Grade="FAIL"

elif [ $per -ge 35 -a $per -lt 45 ] ; then

Grade="THIRD"

elif [ $per -ge 45 -a $per -lt 60 ] ; then

Grade="SECOND"

elif [$per -ge 60 -a $per -lt 75 ] ; then

Grade="FIRST"

elif [ $per -ge 75 ] ; then

Grade="DISTINCTION"

fi

echo Grade=$Grade

**Output:**

cs17@cs17-desktop:~$ chmod u+x prac2

cs17@cs17-desktop:~$ ./prac2

enter marks m1 m2 m3 m4 m5

35 45 60 75 80

per=59

Grade=SECOND

4.Write and execute a shell script to find gross salary for an employee. If basic salary is greater than 15000 then HRA=10%, DA=9% else for others HRA=Rs. 500 DA=9.8%. Calculate the gross salary as per the basic salary entered by user.

Ans:

**Input:**

echo enter the salary of employee

read sal

echo sal=$sal

if [ $sal -gt 15000 ] ; then

HRA=`expr $sal \\* 0.1`

DA=`expr $sal \\* 0.09`

else

HRA=500

DA=`expr $sal \\*

**Output:**

cs17@cs17-desktop:~$ chmod u+x prac3

cs17@cs17-desktop:~$ ./prac3

enter the salary of employee 20000

HRA=2000

DA=1800

5.Write and execute a shell script to find the filename entered by user exist or not.

Ans:

**Input:-**

**prac4**

echo enter Filename

read fname

if [ -f $Fname ];then

echo yes File exist

cut $fname

else

echo no file doesnt exist

fi

**Output:-**

cs17@cs17-desktop:~$ chmod u+x prac4

cs17@cs17-desktop:~$ ./prac4

enter Filename

prac1

yes File exist

6.Write and execute a shell script to accept two strings from user and compare them whether they are identical.

Ans:

**Input:-**

**pra5**

echo enter two strings

read str1 str2

if [ $str1 = $str2 ]

then

echo strings are equal

else

echo strings are not equal

fi

**Output:-**

cs17@cs17-desktop:~$ chmod u+x prac5

cs17@cs17-desktop:~$ ./prac5

enter two strings

deepak deepak

strings are equal

7.Write and execute a shell script to check whether file has a permission to write. If yes then allow the user to append some text in to it else show appropriate msg.

Ans:

**Input:-**

**prac6**

echo enter filename

read fname

if [ -w $fname ];then

echo enter same text to append

cat>>$fname

echo"done">>$fname

else

echo sorry cant append data

fi

**Output:-**

cs17@cs17-desktop:~$ chmod u+x prac6

cs17@cs17-desktop:~$ ./prac6

enter filename

user

enter same text to append

bhavans

college

^Z

[1]+ Stopped ./prac7

cs17@cs17-desktop:~$ cat user

bhavans

college

8.Write and execute a shell script to print day of week where day number (1..7) is entered by user. (User case..in)

Ans:

**Input:-**

**prac7**

echo enter day name from 1 to 7

read day

case $day in

1)echo Monday;;

2)echo tuesday;;

3)echo wednesday;;

4)echo thursday;;

5)echo friday;;

6)echo saturday;;

7)echo sunday;;

\*)echo invalid number;;

esac

**Output:-**

cs17@cs17-desktop:~$ chmod u+x prac7

cs17@cs17-desktop:~$ ./prac7

enter day name from 1 to 7

7

sunday

9.Write and execute a shell script to find type of the character entered (uppercase, lowercase, digit, special symbol etc).

Ans:

**Input:-**

**prac8**

echo enter any character

read char

case $char in

[@#$%^!]) echo symbol;;

[0-9]) echo numbers;;

[A-Z]) echo character in uppercase;;

[a-z]) echo character in lowercase;;

esac

**Output:-**

cs17@cs17-desktop:~$ chmod u+x prac8

cs17@cs17-desktop:~$ ./prac8

enter any character

a

character in lowercase

cs17@cs17-desktop:~$ ./prac8

enter any character

@

symbol

cs17@cs17-desktop:~$ ./prac8

enter any character

A

character in uppercase

cs17@cs17-desktop:~$ ./prac8

enter any character

4

numbers

10.Write and execute a shell script to match the following pattern for the word entered by user

–the word begins with vowel

–the word ends with digit

–the word starts with digit

–the word is of 4 letters.

Ans:

**Input:\_**

**prac9**

echo enter a character

read char

case $char in

[aeiou]\*) echo word begins with vowels;;

\*[0-9]) echo words ends with digits;;

[0-9]\*) echo word starts with digits;;

????) echo word is of 4 letters;;

\*) echo invalid

esac

**Output:-**

cs17@cs17-desktop:~$ chmod u+x prac9

cs17@cs17-desktop:~$ ./prac9

enter a character

fast

word is of 4 letters

cs17@cs17-desktop:~$ ./prac9

enter a character

9

words ends with digits

11.Write and execute a shell script to find type of file (c file, txt file, out file or others)

Ans:

**Input:-**

**prac10**

echo enter filename with extension

read fname

case $fname in

\*.c) echo Its C program file;cat $fname;;

\*.out) echo Its output file;cat $fname;;

\*.txt) echo Its Text file;cat $fname;;

\*) echo other file;;

esac

**Output:-**

cs17@cs17-desktop:~$ chmod u+x prac10

cs17@cs17-desktop:~$ ./prac10

enter filename with extension

sample1.c

Its C program file

#include<stdio.h>

void main(){

printf("SPARTANS");

}

cs17@cs17-desktop:~$ ./prac10

enter filename with extension

sample2.out

Its output file

this is linux pracical

cs17@cs17-desktop:~$ ./prac10

enter filename with extension

sample3.txt

Its Text file

this is linux pracicals