If Conditional Construct in Shell Program

```sh
#!/bin/sh
echo "Enter Source and Target Filenames"
read source target
if cp $source $target
then
    echo "File Copied Successfully"
else
    echo "Copying of file Failed"
fi
```

Enter Source and
  Target Filenames
Text.txt Text1.txt
File copied Successfully

Operator

- -eq – equal to
- -ne – Not equal to
- -ge – greater than equal to
- -gt – greater than
- -lt – less than
- -le – less than equal to

```sh
#!/bin/sh
echo "Enter a Number from 1 to 10"
read num
if test $num -lt 6
then
    echo "I used to think I was indecisive"
    echo "Anonymous"
fi
```

Shell program to check wheather given number
is +ve, -ve, 0.

```
echo " Enter the number"
eg { read n
if [ $n -eq 0]
then
        echo " The number is zero"
else if [ $n -gt 0]
elif then
        echo " The number is positive"
    else
        echo " The number is negative"

    fi

fi
```

O/P
Enter the number
-6
The number is ne-
            -gative

Write a shell script to check wheather the file
→ directory file or not, print corresponding file.

```
echo " to check file directory or not"
read filename
if [ =d $ filename]
then
echo " It is  a directory file"
else
echo " It is not a directory file"
fi
```

O/P
to check file directory or not
    402.
It is a directory file

Write a shell program to print largest of two numbers

```
echo "Enter two numbers"
read n m
if [ $n -gt $m ] then
echo " Largest number is $n"
else
echo " Largest number is $m"
fi
```

```
echo "Largest number using
          positional parameter"
echo " $0 =" $0
echo "$1 =" $1
echo "$2 =" $2
if [ $1 -gt $2 ] then
echo "Largest num is $1"
else
echo "Largest num is $2"
fi
```

Write a shell program to print largest of three numbers

```
echo "Enter three numbers"
read  a  b  c
if [ $a -gt $b && $a -gt $c ] then
   echo " Largest number is $a"
else if [ $b -gt $c ] then
   echo ". Largest number is $b"
else
   echo " Largest number is $c"
fi
fi
```

O/P
Enter 3 number
2 4 6.
Largest number is 6.

String Comparision

```
S1 = S2  → String S1 = S2
S1 != S2  → S1 is not equal to S2
-n stg  → string stg is not a null string
-z stg  → string stg is a null string
stg     → String stg is assigned and not null
S1 == S2 → String S1 = S2 [ Korn and Bash only ]
```

Write a shell program to compare two strings and print whether they are equal or not equal.

```
echo "Enter string1 and string2"
read str1 str2
if [ $str1 = $str2 ] then
echo " Given strings are equal"
else
echo " Given strings are not equal"
fi
```

Switch

```
case word in
pattern1) statement to be executed
pattern2) statement to be executed
*) Default condition to be executed::
esac
```

Add 2 numbers, Sub, mul, div using case statement.

```
echo "Enter 2 numbers"
read n m
echo "Enter the operation"
read op
case $op in
  "add") add='$n + $m' |bc'
         echo "$add"
  "sub") sub=' $n-$m' |bc'
         echo "$sub"
  "mul") mul='echo $n\*$m | bc'
          echo "$mul"
  "div") div ='echo $n|$m |bc'
          echo "$div"
esac
```

• Compute grass salary of an employee

1) basic Salary person
2) For that add 10% hra
3) For that add 20% da

Print Final Salary

even or odd.

```
echo "enter num"
read n
if [ 'expr $n % 2' -eq 0]
then
echo "even"
else
echo "odd"
fi
```

O/P

```
enter num
84
even
```

[9/11/22]

Program to print numbers from 1 to 5

```
i=1    read n
while [ $i -le $n ]
do
    echo $i
    i=`expr $i+1`
done
```