LAB 2

1. Number is zero or positive or negative

```sh
#/bin/sh
echo "Enter a number "
read num
if [ $num -eq 0 ]
then
        echo "Number is zero"
elif [ $num -gt 0 ]
then
        echo "Number is positive"
else
        echo "Number is negative"
fi
~
```

```
bmsce@bmsce-Precision-T1700:~$ vi number.sh
bmsce@bmsce-Precision-T1700:~$ sh number.sh
Enter a number
0
Number is zero
bmsce@bmsce-Precision-T1700:~$ sh number.sh
Enter a number
-5
Number is negative
```

2 greatest of 3 numbers

```sh
#/bin/sh
echo "Enter 3 numbers"
read a b c
if [ $a -gt $b -a $a -gt $c ]
then
        echo " $a is greatest "
elif [ $b -gt $a -a $b -gt $c ]
then
        echo " $b is greatest "
else
        echo " $c is greatest "
fi
~
```

```
bmsce@bmsce-Precision-T1700:~$ vi greatest.sh
bmsce@bmsce-Precision-T1700:~$ sh greatest.sh
Enter 3 numbers
10 100 20
  100 is greatest
bmsce@bmsce-Precision-T1700:~$ sh greatest.sh
Enter 3 numbers
10 20 50
  50 is greatest
```

3 Leap year or not

```
#/bin/sh
echo "Enter a year"
read year

if [ `expr $year % 100` -eq 0 -a `expr $year % 400` -ne 0 ]
then
        echo "It is not a leap year"
elif [ `expr $year % 4` -eq 0 ]
then
        echo "It is a leap year"

else
        echo "It is not a leap year"
fi
~
```

```
bmsce@bmsce-Precision-T1700:~$ vi LYear.sh
bmsce@bmsce-Precision-T1700:~$ sh LYear.sh
Enter a year
1700
It is not a leap year
bmsce@bmsce-Precision-T1700:~$ 1600
1600: command not found
bmsce@bmsce-Precision-T1700:~$ sh LYear.sh
Enter a year
1600
It is a leap year
```

4 area of circle

```
#/bin/sh
echo "Enter radius of circle "
read rad
echo "Area of circle is :"
echo " 3.14 * $rad * $rad " | bc
~
~
```

```
bmsce@bmsce-Precision-T1700:~$ vi circle_area.sh
bmsce@bmsce-Precision-T1700:~$ sh circle_area.sh
Enter radius of circle
10
Area of circle is :
314.00
bmsce@bmsce-Precision-T1700:~$
```