1. Find wether a number is positive, negative or zero?

```sh
#/bin/sh

echo "enter number to check"
read number

if [ $number -gt 0 ]
then
echo "the number is positive"
elif [ $number -lt 0 ]
then
echo "The number is negative"
else
echo "the number is zero"
fi
```

```
bmsce@bmsce-Precision-T1700:~/dev$ sh pnz.sh
enter number to check
-2
The number is negative
bmsce@bmsce-Precision-T1700:~/dev$
```

2. Find the greatest of three numbers?

```sh
#/bin/sh

echo "Enter three numbers "
read a b c

if [ $a -gt $b -a $a -gt $c ]
then
echo "The greatest number is : " $a
elif [ $b -gt $a -a $b -gt $c ]
then
echo "The greatest number is : " $b
elif [ $c -gt $a -a $c -gt $b ]
then
echo "The greatest number is : " $c
fi
```

```
bmsce@bmsce-Precision-T1700:~/dev$ sh greatest.sh
Enter three numbers
3 2 1
The greatest number is :  3
bmsce@bmsce-Precision-T1700:~/dev$
```

3. Leap year or not ?

```bash
#/bin/bash

echo "Enter year to check"
read year

if [ `expr $year % 4` -eq 0 ]
then
        echo "Its a leap Year"
else
        echo "Its not a leap year"
fi
```

```
bmsce@bmsce-Precision-T1700:~/dev$ sh leapYear.sh
Enter year to check
2020
Its a leap Year
bmsce@bmsce-Precision-T1700:~/dev$ sh leapYear.sh
Enter year to check
2021
Its not a leap year
bmsce@bmsce-Precision-T1700:~/dev$
```

4. Find area of a circle ?

```
#/bin/sh

echo "enter radius of circle"
read r

echo "Area of Circle is :"
echo "3.14 * $r * $r" | bc
~
```

```
bmsce@bmsce-Precision-T1700:~/dev$ sh area.sh
enter radius of circle
10
Area of Circle is :
314.00
bmsce@bmsce-Precision-T1700:~/dev$ $
```