Lab 04

1. leap year

```
echo "Enter the year:"
read year
a= `expr $year % 4`
b= `expr $year % 400`
c= `expr $year % 100`
if [ $a -eq 0 ] || [ $b -eq 0 ] && [ $c -ne 0 ]
then
    echo "leap year"
else
    echo "Not leap"
fi
```

O|P:

```
Enter the year
2020
leap year
Enter the year
2019
Not leap
```

2. Determine type of integer

```
echo "Enter the number"
read n
if [ $n -eq 0 ]
echo "zero"
else if [ $n -gt 0 ]
echo "positive"
else
```

```
        echo "negative"
    fi
fi
```

OIP:
```
Enter the number
0
zero
```

```
Enter the number
-20
Negative
```

3. largest of 3 numbers.

```
echo "Enter the number"
read   a
read   b
read   c
if [ $a -gt $b ] && [ $a -gt $c ]
then
    echo "$a is greater"
else if [ $b -gt $a ] && [ $b -gt $c ]
then
    echo "$b is greater"
else
    echo "$c is greater"
fi
fi
```

OIP:
```
Enter the number : 5  7  9
9  is greater
```

4. Find the greatest using command line arguments

```
echo "finding largest no."
if [$1 -gt $2] && [$1 -gt $3]
then
echo "$1"
else if [$2 -gt $1] && [$2 -gt $3]
then
echo "$2"
else
echo "$3"
fi
fi
```

5. To compare 2 strings

```
echo "Enter str1 & str2"
read str1
read str2
if [$str1 = str2]
then
echo "true"
else
echo "false"
fi
```

O|P:

```
Enter str1 & str2
abc
abc
True
```

To check if its a directory file.
```
echo "Enter file name"
read file
if [ -d $file]
then
echo "It is a directory file"
else
echo "It is not a directory file"
fi
```

To check if even or odd

```
echo "Enter the number"
read n
a=`expr $n % 2`
if [ $a -eq 0]
then
echo "Even"
else
echo "Odd"
```