Print whether the number is even or odd

```
echo "Enter the num"
read num
if [ `expr $num % 2` -eq 0 ]
then
    echo "the num is positive"
else
    echo "the num is negative"
fi
```

19/11/22

① write a shell Program to check whether the year is leap year or not

```
#!/bin/bash
echo "Check whether leap year or not"
echo "Enter the year"
read year
if [ `expr $year % 4` -eq 0 ]
then
    echo "Year is a leap year"
```

```
elif [ `expr $year % 400` -eq 0 ]
then
    echo "year is leap year"
elif [ `expr $year % 100` -eq 0 ]
then
    echo "year is not a leap"
else
    echo "end"
fi
```

Output:

```
leap year or not
Enter the year
2008
Year is leap year.
```

(2) write a shell program to check whether the given number is positive, negative or zero.

```
#!/bin/bash
echo "check num is positive or negative"
```

```
echo " Enter the number"
read n.
if [ $n -gt 0 ]
then
    echo " $n is positive"
elif [ $n -lt 0 ]
then
    echo " $n is negative"
elif [ $n -eq 0 ]
then
    echo " $n is zero"
else
    echo " Enter proper input"
fi
else
    echo " The num is zero"
fi
```

output:- Check whether number is positive or negative

```
Enter the number
-8
-8 is negative
```

Date: / /

Enter the number.
9
9 is positive.

(3) Write a shell program to print largest of given 3 numbers.

```
#! /bin/bash

echo "Greatest of three numbers"
echo "Enter the first number"
read num1
echo "Enter the second number"
read num2
echo "Enter the third number"
read num3
if [ $num1 -gt $num2 ] && [ $num1 -gt
                            $num3 ]
then
    echo "$num1 is greater"
elif [ $num2 -gt $num1 ] && [$num2 -gt
                            $num3 ]
then
    echo "$num2 is greater"
else
```

paperang

Date: / /

* echo "$num3 is greater"

fi

output:

greatest of three numbers.

Enter the first number

6

Enter the second number.

12

Enter the third number

9

12 is greater.

Date: / /

4) Greatest [largest of three numbers using positional parameters

```
echo "Largest of 3 numbers using pm"
echo '$0 = '$0
echo '$1 = '$1
echo '$2 = '$2
echo '$3 = '$3

if [ $1 -gt $2 ] && [ $1 -gt $3 ]
then
    echo "$1 is greater"
elif [ $2 -gt $1 ] && [ $2 -gt $3 ]
then
    echo "$2 is greater"
else
    echo "$3 is greater"
fi
```

O/p:-

```
Largest of 3 numbers using pm
$0 = largest.sh
$1 = 10
$2 = 50
$3 = 70
70 is greater
```

5) Strings are equal or not

```
echo " Enter the first string "
read s1
echo " Enter the second string "
read s2
if [ $s1 = $s2 ]
then
    echo " strings are equal "
else
    echo " strings are not equal "
```

o/p

Enter the first string
hema
Enter the second string
hema
Strings are not equal.

(6) Check whether given is directory file or not

```
echo " Enter the filename "
read filename
```

```
if [ -d $filename ]
then
    echo " It is a directory"
else
    echo " It is not a directory"
fi
```

```
$ mkdir hg
$ sh directory.sh
Directory or not
Enter the filename
hg
It is not a directory
```

o/p

Enter the number.
5
It is not even.

9/11/22

LAB- 28/11/22