1. Write a Python Program to Check if a Number is Positive, Negative or Zero?

ANS :

a = int(input('Print a value : '))

if a == 0:

print('Number {} is zero '.format(a))

elif a < 0:

print('Number {} is -ve'.format(a))

else:

print('Number {} is +ve'.format(a))

OUTPUT :

Print a value : 100

Number 100 is +ve

1. Write a Python Program to Check if a Number is Odd or Even?

ANS : a = int(input('Enter a value : '))

if a%2==0:

print(' value {} is even'.format(a))

else:

print('value {} is odd'.format(a))

OUTPUT :

Enter a value : 23

value 23 is odd

1. Write a Python Program to Check Leap Year?

ANS :

year= int(input (' Enter year value :'))

if year%4==0:

print('Leap year')

else:

print('Non-Leap year')

Output :

Enter year value :2021

Non-Leap year

1. Write a Python Program to Check Prime Number?

Ans:

num = int(input('Enter a value :'))

if num%2 !=0 and num%3 !=0 and num%5 !=0 and num%7 !=0 :

print('its a prime number ')

elif num ==2 or num==3 or num==5 or num==7:

print('its a prime number ')

else :

print(' its not a prime number')

Output :

Enter a value :10

its not a prime number

1. Write a Python Program to Print all Prime Numbers in an Interval of 1-10000?

Ans : num = range(0,10000)

for i in num :

if i%2 !=0 and i%3 !=0 and i%5 !=0 and i%7 !=0 :

print(i)

elif i ==2 or i==3 or i==5 or i==7:

print(i)

Output :

1

2

3

5

7

11

13……..