### Que:-1 Write a Python program to check if a Number is Positive, Negative or Zero ?

```python
In [3]:
#solution:-

def number(num):
    if num > 0:
        print(f"{num} is positive")
    elif num < 0:
        print(f"{num} is negative")
    else:
        print("Number is Zero")

num = int(input("Enter a number: "))
number(num)
```

```
Enter a number: 10
10 is positive
```

### Que:-2 Write a Python program to check if a Number is Odd or Even ?

```python
In [6]:
#solution:-

def number(num):
    if num%2 == 0:
        print(f"{num} is prime number")
    else:
        print(f"{num} is odd number")
num = int(input("Enter a number:-"))
number(num)
```

```
Enter a number:-5
5 is odd number
```

### Que:-3 Write a Python program to check Leap Year ?

In [7]:
```python
#solution:-

def year(yea):
    if yea%4 == 0 :
        print(f"{yea} is a leap year")

    else:
        print(f"{yea} is not a leap year")

yea = int(input("Enter a year:-"))
year(yea)
```

```
Enter a year:-2012
2012 is a leap year
```

### Que:-4 Write a Python program to check Prime Number ?

In [4]:
```python
#solution:-

def number(num):
    for i in range(2,num):
        if num%i == 0 :
            print(f'{num} is prime number')
            break
        else:
            print(f'{num} is not prime')
num = int(input("Enter the number:-"))
number(num)
```

```
Enter the number:-3
3 is not prime
```

**Que:-5 Write a Python program to print all Prime Numbers in an interval of 1-10000 ?**

In [2]:
```python
#solution:-


x = 1
y = 10000

for num in range(x,y):

        for i in range(2,num):
            if (num%i) == 0:
                break

        else:
            print(num)
```

```
1
2
3
5
7
11
13
17
19
23
29
31
37
41
43
47
53
59
61
```

In [ ]: