In [4]:

```python
a= int(input())
if a<0:
    print(a,"is a Negative number")
elif a>0:
    print(a,"is a positive number")
else:
    print("its a zero")
```

```
2
2 is a positive number
```

In [10]:

```python
a= int(input())
if a%2==0:
    print(a,it is a even")
else:
    print("it is a odd")
```

```
0
it is a even
```

In [4]:

```python
year = int(input("Enter the year you want to check \n"))
if year % 4 == 0:
  if year % 100 == 0:
    if year % 400 == 0:
      print("Leap year.")
    else:
      print("Not leap year.")
  else:
    print("Leap year.")
else:
  print("Not leap year.")
```

```
Enter the year you want to check
2022
Not leap year.
```

In [15]:

```python
num = int(input("Enter the number"))
if num>1:
    for i in range(2,num):
        if num%i==0:
            print(num,"is not a prime number")
            break
    else:
        print("it is a prime number")
else:
    print("it is not a prime number")
```

Enter the number407
407 is not a prime number

In [19]:

```python
number = 10000
for num in range(1,number+1):
    if num>1:
        for i in range(2,num):
            if num%i==0:
                break
        else:
            print(num)
```

9733
9739
9743
9749
9767
9769
9781
9787
9791
9803
9811
9817
9829
9833
9839
9851
9857
9859
9871
9883

In [ ]:

In [ ]: