

## Prime Number Program in Java

Prime number in Java: **Prime number** is a number that is greater than 1 and divided by 1 or itself only. In other words, prime numbers can't be divided by other numbers than itself or 1. For example 2, 3, 5, 7, 11, 13, 17.... are the prime numbers.

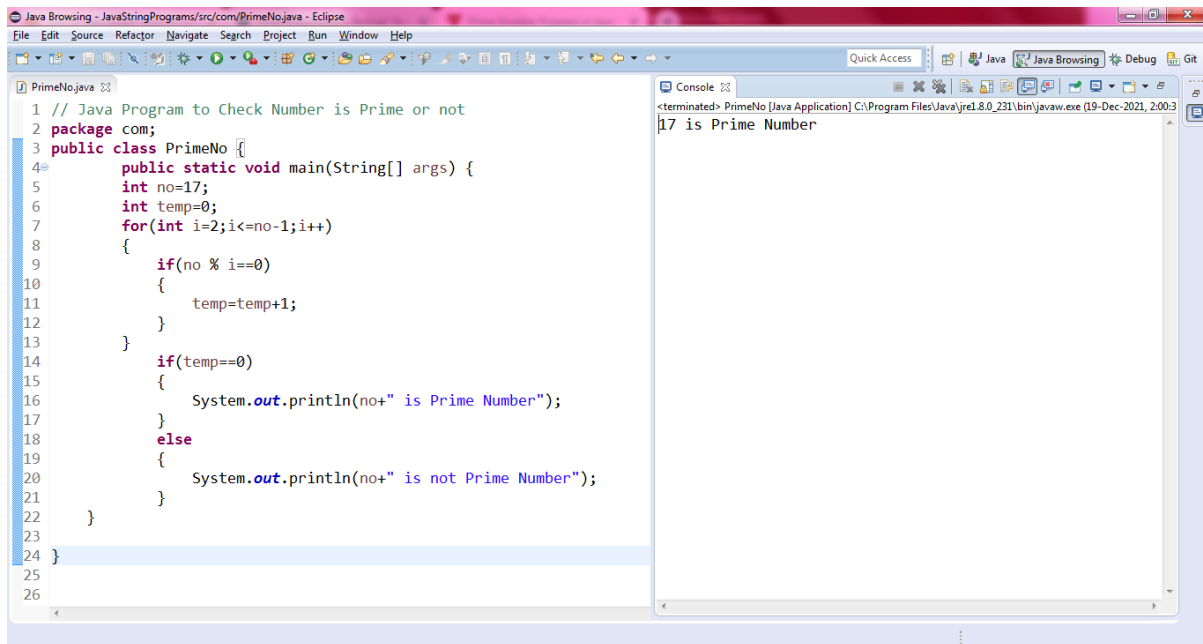
Note: 0 and 1 are not prime numbers. The 2 is the only even prime number because all the other even numbers can be divided by 2.

### / Java Program to Check Number is Prime or not

```
package com;
```

```
public class PrimeNo {
```

```
    public static void main(String[] args) {
        int no=17;
        int temp=0;
        for(int i=2;i<=no-1;i++)
        {
            if(no % i==0)
            {
                temp=temp+1;
            }
        }
        if(temp==0)
        {
            System.out.println(no+" is Prime Number");
        }
        else
        {
            System.out.println(no+" is not Prime Number");
        }
    }
}
```



## Leap Year Program in Java

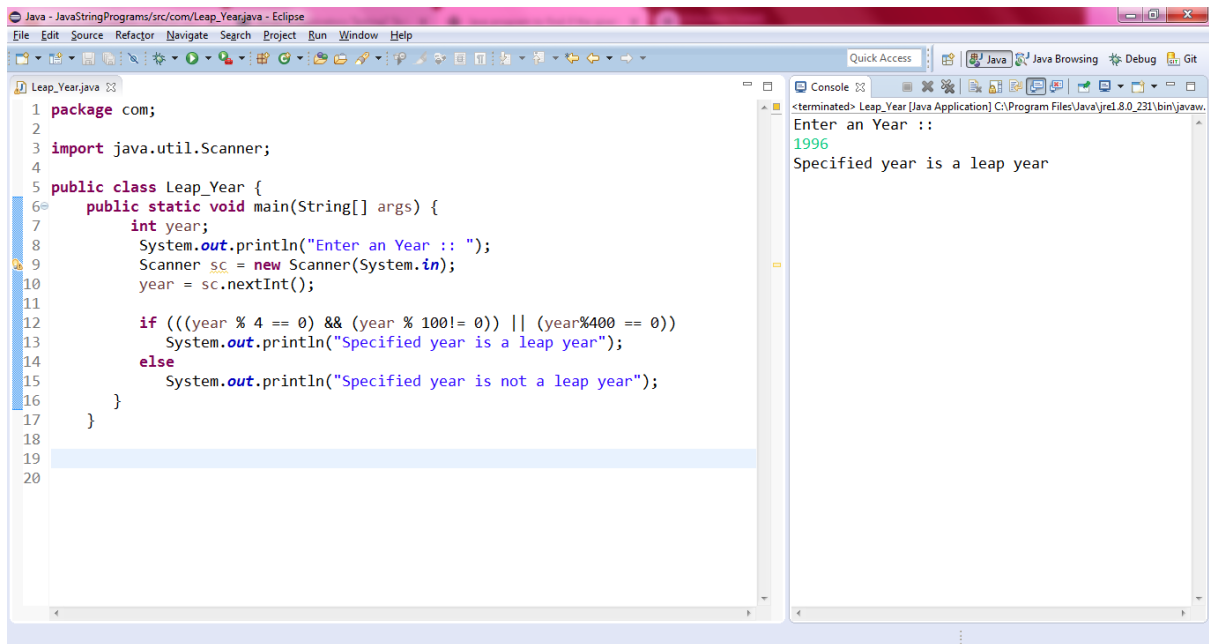
A year is a leap year if –

- 1) It is evenly divisible by 100
- 2) If it is divisible by 100, then it should also be divisible by 400
- 3) Except this, all other years evenly divisible by 4 are leap years

### Code

```
package com;
import java.util.Scanner;
public class Leap_Year {
    public static void main(String[] args) {
        int year;
        System.out.println("Enter an Year :: ");
        Scanner sc = new Scanner(System.in);
        year = sc.nextInt();

        if (((year % 4 == 0) && (year % 100 != 0)) || (year % 400 == 0))
            System.out.println("Specified year is a leap year");
        else
            System.out.println("Specified year is not a leap year");
    }
}
```



## Even and Odd Number Program in Java

A number that is divisible by 2 and generates a remainder of 0 is called an even number. All the numbers ending with 0, 2, 4, 6, and 8 are even numbers. On the other hand, number that is not divisible by 2 and generates a remainder of 1 is called an odd number. All the numbers ending with 1, 3, 5, 7, and 9 are odd numbers.

### Code

```
//Java Program to Check number is Even or Odd
package com;

public class EvenOdd {
    public static void main(String[] args) {
        int num = 10;
        if (num % 2 == 0)
        {
            System.out.println(num+" Number is Even");
        }
        else
        {
            System.out.println(num+" Number is Odd");
        }
    }
}
```

