```java
// a method that checks for primality

public class Ch6DemoPrimeNumberDetection
{
    public static void main(String[] args)
    {
        int num = 2;

        while (num < 100)
        {
            if (isPrime(num))
            {
                System.out.print(num + " ");
            }

            num ++;
        }
    }

    public static boolean isPrime(int num)
    {

        for (int i = 2; i <= Math.sqrt(num); i += 2)
        {

            if (num % 2 == 0 && num != 2 ||
                num % 3 == 0 && num != 3 ||
                num % 5 == 0 && num != 5 ||
                num % 7 == 0 && num != 7 ||
                num % 11 == 0 && num != 11 ||
                num % 13 == 0 && num != 13)
            {
                return false;
            }
        }

        return true;
    }
}
```