

<https://course.acciojob.com/idle?question=12e769f2-978b-43fd-83d4-07bc0a834a89>

● EASY

● Max Score: 20 Points

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Optimus Prime

Given an integer n , print all prime numbers between 1 and n (both inclusive).

Example:

If $n = 8$, your program should output all prime numbers between 1 and 8. Thus, it should output:

2
3
5
7

Input Format

The first line of the input contains one integer n .

Output Format

Your code should output all integers between 1 and n that are prime (both inclusive).

Example 1

Input:

8

Output:

2
3
5
7

Example 2

Input:

13

Output:

2
3
5
7
11
13

Constraints

$1 \leq n \leq 10^5$

Topic Tags

My code

// in java

import java.util.*;

```
public class Main {  
    static boolean isPrime(int n) {
```

```

    if (n == 2) {
        return true;
    }
    // every composite number has a prime factor
    // less than or equal to its square root.
    for (int i = 2; i * i <= n; i++) {
        if (n % i == 0) {
            return false;
        }
    }
    return true;
}

static void findPrimesUntilN(int n) {
    //Write code here
    for (int i = 2; i <= n; i++) {
        if (isPrime(i))
            System.out.println(i);
    }

}

public static void main(String[] args) throws Throwable {
    Scanner sc = new Scanner(System.in);
    int n = sc.nextInt();
    findPrimesUntilN(n);
}
}

```