

Question

Hints

Help Requests


Submissions

Discussions

Your Score: 100

Max Score: 100

Q1. Is It Prime? </> Solved



Stuck somewhere?
Ask for help from a TA and get it resolved.

Get help from TA.

Problem Description

Given an integer **A**, you have to tell whether it is a prime number or not.
A prime number is a natural number **greater** than **1** which is divisible only by **1** and **itself**.

Problem Constraints

1 <= A <= 10⁶

Input Format

First and only line of the input contains a single integer **A**.

Output Format

Print **YES** if **A** is a prime, else print **NO**.

Example Input

Input 1:

3

Input 2:

4

Example Output

Output 1:

YES

Output 2:

NO

Example Explanation

Explanation 1:

3 is a prime number as it is only divisible by 1 and 3.

Explanation 2:

4 is not a prime number as it is divisible by 2.

Java7 (Open-Jdk-1.7.0)

```
1 import java.util.Scanner;
2
3 public class Main {
4     public static void main(String[] args) {
5         int num;//input
6         int count = 0; //keep track of divisor
7
8         Scanner input = new Scanner(System.in);
9
10        num = input.nextInt(); //read input
11
12        for(int i = 1; i <= Math.sqrt(num); i++)
13        {
14            if((num % i) == 0)
15            {
16                if(i == (num/i))
17                {
18                    count++;
19                }else{
20                    count += 2;
21                }
22            }
23
24            if(count > 2)
25            {
26                break;
27            }
28        }
29    }
```

Test Output Code's All Neat!

Test

Test With Custom Input

Re-Run Custom Test

Submit