Problem statement Send feedback

A prime number is a positive integer that is divisible by exactly 2 integers, 1 and the number itself.

You are given a number ***'n'***.

Find out whether 'n' is prime or not.

Example :

```
Input: 'n' = 5

Output: YES

Explanation: 5 is only divisible by 1 and 5. 2, 3 and 4 do not divide 5.
```

Detailed explanation (Input/output format, Notes, Images)

Sample Input 1:

```
5
```

Sample Output 1:

```
YES
```

Explanation of sample input 1 :

```
5 is only divisible by 1 and 5. 2, 3 and 4 do not divide 5.
```

Sample Input 2:

```
6
```

Sample Output 2:

```
NO
```

Explanation of sample input 2 :

```
6 is divisible by 1, 2, 3, and 6. Therefore it is not a prime number.
Numbers having more than two factors are known as composite numbers.
```

Sample Input 3:

```
1
```

Sample Output 3:

```
NO
```

Explanation of sample input 3 :

1 is divisible only by 1, having only one factor. Therefore it is not a prime number.
1 is neither a prime nor a composite number.

Expected time complexity :

The expected time complexity is O(sqrt('n')).

Constraints :

1 <= 'n' <= 10 ^ 9

Time limit: 1 second