

# Next Prime Number

Given an integer **N**. The task is to find the next prime number i.e. the smallest prime number greater than **N**.

**Examples:**

Input:  $N = 10$

**Output:** 11

*11 is the smallest prime number greater than 10.*

**Input:**  $N = 0$

**Output:** 2

```
#include<bits/stdc++.h>
using namespace std;

int nextPrime(int n){
    n++;
    while(true){
        int i;
        for(i = 2; i < n; i++){
            if(n % i == 0)
                break;
        }
        if(i == n)
            return n;
        n++;
    }
}

int main()
{
    int n;
    cin >> n;
```

```
    cout << nextPrime(n);  
  
    return 0;  
}
```

**INPUT :**

15

**OUTPUT :**

17