

Alice has a mathematics test for which she is underprepared. She has to do at least one question correctly to pass the test. He decides to do a question which needs her to find the smallest prime number which is larger than a given integer N. Your task is to find and return an integer value representing the smallest prime number larger than N.

#### **Input Format**:

input1: An integer value N

### **Output Format:**

Return an integer value representing the smallest prime number larger than N.

#### Sample Input

## **Sample Output**

7

# 3000000 **Source Code:**

```
n=int(input())
 num=n+1
while True:
                                    is_prime=True
                                     if num>1:
                                                                        for i in range(2,int(num**0.5)+1):
                                                                                                             if num%i==0:
                                                                                                                                                is_prime=False
                                                                                                                                                break
                                                                         if is_prime:
                                                                                                             print(num)
                                                                                                             break
                                     num+=1
                                                                                                   38R23CD090 
                                      30
```

**RESULT**