STUDENT REPORT

DETAILS

Name

V K SRIJA

Roll Number

3BR23AI172

EXPERIMENT

Title

MATHS TEST

Description

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

6

Sample Output

7

Source Code:

```
import math

def is_prime(num):
    if num <= 1:
        return False
    if num == 2:
        return True
    if num % 2 == 0:
        return False
    for i in range(3, int(math.sqrt(num)) + 1, 2):
        if num % i ==0:
            return False
    return True

def next_prime(N):
    candidate = N + 1
    while True:
        if is_prime(candidate):
            return candidate
        candidate += 1

N = int(input())
result = next_prime(N)
print(result)
```

RESULT

5 / 5 Test Cases Passed | 100 %