



# STUDENT REPORT

## DETAILS

Name

Suraj Desai

Roll Number

3BR23EE099

## 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:

```
def next_prime(N):
    num = N + 1

    while True:

        is_prime = True
        for i in range(2, int(num**0.5) + 1):
            if num % i == 0:
                is_prime = False
                break

        if is_prime:
            return num

        num += 1

N = int(input())

result = next_prime(N)

print(result)
```

## RESULT

5 / 5 Test Cases Passed | 100 %