



# STUDENT REPORT

## DETAILS

### Name

MOHAMMED GOUSE H

### Roll Number

TEMPBTech-CSE034

## 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 %