STUDENT REPORT

DETAILS

Name

M ADITYA

Roll Number

TEMPBTech-ECE021

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:

```python
def is_prime(num):

    if num <= 1:

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

def smallest_prime_greater_than_n(n):
    candidate = n + 1  # Start checking from N + 1
    while True:
        if is_prime(candidate):
            return candidate
        candidate += 1  # Check the next number

# Input reading
n = int(input().strip())  # Read the integer N

# Calculate and print the result
result = smallest_prime_greater_than_n(n)
print(result)
```

RESULT

5 / 5 Test Cases Passed | 100 %