



STUDENT REPORT

DETAILS

Name

HANUMANTHA B K

Roll Number

3BR21CS050

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:

```
n=int(input())
c=n+1
while True:
    i_p=True
    if c<=1:
        i_p=False
    elif c<=3:
        i_p=True
    elif c%2==0 or c%3==0:
        i_p=False
    else:
        i=5
        while (i*i)<=c:
            if c%i==0 or c%(i+2)==0:
                i_p=False
                break
            i+=6
    if i_p:
        print(c)
        break
    c+=1
```

RESULT

5 / 5 Test Cases Passed | 100 %