Logo

STUDENT REPORT

DETAILS

Name

SAMALA JAHNAVI

Roll Number

23D21A05H4

EXPERIMENT

Title

SPECIAL FIBONACCI

Description

Alex is exploring a series and she came across a special series, in which

f(N)=f(N-1)*f(N-1)+f(N-2)*f(N-2) mod 47

where f(0) = 1. f(1)=1

Your task is to help Alex find and return an integer value, representing the Nth number in this special series.

Input Specification:

input1: An integer value N.

Output Specification:

Return an integer value, representing the Nth number in this special fibonacci series.

Sample Input:

4

Sample Output:

29

Source Code:

```
def special_series(N):
    if N == 0 or N == 1:
        return 1
    f = [0] * (N+1)
    f[0],f[1] = 1, 1
    for i in range (2, N+1):
        f[i] = (f[i-1]*f[i-1] + f[i-2]*f[i-2]) % 47
    return f[N]
N = int(input())
print(special_series(N))
```

RESULT

5 / 5 Test Cases Passed | 100 %