Logo

STUDENT REPORT

DETAILS

Name

GAJENDRAREDDY K

Roll Number

KUB23ECE012

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 fib(n,memo={}):
    if n==0 or n==1:
        return 1
    if n in memo:
        return memo[n]
    res=(fib(n-1,memo)**2+fib(n-2,memo)**2)%47
    memo[n]=res
    return res
n=int(input())
print(fib(n))
```

RESULT

5 / 5 Test Cases Passed | 100 %