Logo

STUDENT REPORT

DETAILS

Name

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Roll Number

23D21A05H4

EXPERIMENT

Title

FELLIS FUNCTION

Description

Morris Fellis has come up with a new function called Fellis function Morris defines the function as follows:

f(0)=1

f(1)=1

f(N)=f(N-1)+7*f(N-2)+(N/4) modulo 10^9+7

Given an integer N, your task is to help Morris find and return an Integer value of f(N), after performing Fellis Function.

Note: Here the division operator is integer division operator ie, it divides two numbers and returns the integer part of the result

Input Specification:

Input1: An integer value N, representing the Fellis Function value.

Sample Input:

8

Sample Output:

6713

Source Code:

```
def felli(N):
    if N == 0 or N == 1:
        return 1
    f = [0]*(N+1)
    f[0] = 1
    f[1] = 1
    for i in range(2,N+1):
        f[i] = (f[i-1]+7*f[i-2]+(i//4)) % (10 ** 9 +
7)
    return f[N]
N = int(input())
print(felli(N))
```

RESULT

5 / 5 Test Cases Passed | 100 %