Logo

STUDENT REPORT

DETAILS

Name

PUNEETH M P

Roll Number

3BR23CS121

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 fel(n,memo={}):

    if n==0 or n==1:

        return 1
    if n in memo:
        return memo[n]
    res=(fel(n-1,memo)+7*fel(n-2,memo)+n//4)%(10**9+7)
    memo[n]=res
    return res
n=int(input())
print(fel(n))
```

RESULT

5 / 5 Test Cases Passed | 100 %