

```

# -*- coding: utf-8 -*-
"""
Calcule le terme F(n) d'une suite de Fibonacci.
Méthode utilisant le calcul matriciel.
"""

from time import perf_counter
from numpy import matrix, uint64
from numpy.linalg import matrix_power

def fibo_mat(n,a,b):
    M_Init = matrix([[b],[a]],dtype=uint64)
    M_Fibo = matrix([[1,1],[1,0]],dtype=uint64)
    M_Final = matrix_power(M_Fibo,n) * M_Init
    return(M_Final.item(1,0))

n = int(input('Rang du terme à calculer ? '))

t_init = perf_counter()

print('F('+str(n)+') = '+str(fibo_mat(n,0,1)))

t_final = perf_counter()

print('Temps de calcul : '+str(t_final - t_init))

```