2.1.2 Last Digit of Fibonacci Number

Last Digit of Fibonacci Number Problem

Compute the last digit of the n-th Fibonacci number.

Input: An integer *n*.

Output: The last digit of the *n*-th

Fibonacci number.

 $F_{100} = 354224848179$ 261 915 075

Input format. An integer n.

Output format. The last digit of F_n .

Constraints. $0 \le n \le 10^6$.

Sample 1.

Input:

3

Output:

2

 $F_3 = 2$.

Sample 2.

Input:

139

Output:

1

 $F_{139} = 50\,095\,301\,248\,058\,391\,139\,327\,916\,26$ 1.

Sample 3.

Input:

91239

Output:

6

 F_{91239} will take more than ten pages to write down, but its last digit is 6.