**Intersecting Chords in a Circle**

Given a number **A**, return number of ways you can draw **A** chords in a circle with **2 x A** points such that no **2** chords intersect.

Two ways are different if there exists a chord which is present in one way and not in other.

Return the answer modulo **109 + 7**.

**Input Format:**

The first and the only argument contains the integer A.

**Output Format:**

Return an integer answering the query as described in the problem statement.

**Constraints:**

1 <= A <= 1000

**Examples:**

Input 1:

A = 1

Output 1:

1

Explanation 1:

If points are numbered 1 to 2 in clockwise direction, then different ways to draw chords are:

{(1-2)} only.

So, we return 1.

Input 2:

A = 2

Output 2:

2