Given an integer n, return *the****decimal value****of the binary string formed by concatenating the binary representations of*1*to*n*in order,****modulo***109+ 7.

**Example 1:**

**Input:** n = 1

**Output:** 1

**Explanation:** "1" in binary corresponds to the decimal value 1.

**Example 2:**

**Input:** n = 3

**Output:** 27

**Explanation:** In binary, 1, 2, and 3 corresponds to "1", "10", and "11".

After concatenating them, we have "11011", which corresponds to the decimal value 27.

**Example 3:**

**Input:** n = 12

**Output:** 505379714

**Explanation**: The concatenation results in "1101110010111011110001001101010111100".

The decimal value of that is 118505380540.

After modulo 109 + 7, the result is 505379714.

**Constraints:**

* 1 <= n <= 105