On the first row, we write a 0. Now in every subsequent row, we look at the previous row and replace each occurrence of 0 with 01, and each occurrence of 1 with 10.

Given row N and index K, return the K-th indexed symbol in row N. (The values of K are 1-indexed.) (1 indexed).

**Examples:**

**Input:** N = 1, K = 1

**Output:** 0

**Input:** N = 2, K = 1

**Output:** 0

**Input:** N = 2, K = 2

**Output:** 1

**Input:** N = 4, K = 5

**Output:** 1

**Explanation:**

row 1: 0

row 2: 01

row 3: 0110

row 4: 01101001

**Note:**

1. N will be an integer in the range [1, 30].
2. K will be an integer in the range [1, 2^(N-1)].