A **happy string** is a string that:

* consists only of letters of the set ['a', 'b', 'c'].
* s[i] != s[i + 1] for all values of i from 1 to s.length - 1 (string is 1-indexed).

For example, strings **"abc", "ac", "b"** and **"abcbabcbcb"** are all happy strings and strings **"aa", "baa"** and **"ababbc"** are not happy strings.

Given two integers n and k, consider a list of all happy strings of length n sorted in lexicographical order.

Return *the kth string* of this list or return an **empty string** if there are less than k happy strings of length n.

**Example 1:**

**Input:** n = 1, k = 3

**Output:** "c"

**Explanation:** The list ["a", "b", "c"] contains all happy strings of length 1. The third string is "c".

**Example 2:**

**Input:** n = 1, k = 4

**Output:** ""

**Explanation:** There are only 3 happy strings of length 1.

**Example 3:**

**Input:** n = 3, k = 9

**Output:** "cab"

**Explanation:** There are 12 different happy string of length 3 ["aba", "abc", "aca", "acb", "bab", "bac", "bca", "bcb", "cab", "cac", "cba", "cbc"]. You will find the 9th string = "cab"

**Example 4:**

**Input:** n = 2, k = 7

**Output:** ""

**Example 5:**

**Input:** n = 10, k = 100

**Output:** "abacbabacb"

**Constraints:**

* 1 <= n <= 10
* 1 <= k <= 100