

1415. The k-th Lexicographical String of All Happy Strings of Length n

[y Submissions \(/contest/biweekly-contest-24/problems/the-k-th-lexicographical-string-of-all-happy-strings-of-length-n/submissions/\)](/contest/biweekly-contest-24/problems/the-k-th-lexicographical-string-of-all-happy-strings-of-length-n/submissions/)

[ack to Contest \(/contest/biweekly-contest-24/\)](/contest/biweekly-contest-24/)

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`.

User Accepted:	2116
User Tried:	2320
Total Accepted:	2188
Total Submissions:	3249
Difficulty:	Medium

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", "`

Example 4:

Input: `n = 2, k = 7`

Output: `""`

Example 5:

Input: `n = 10, k = 100`

Output: `"abacbabcab"`

Constraints:

- `1 <= n <= 10`
- `1 <= k <= 100`

Discuss (<https://leetcode.com/problems/the-k-th-lexicographical-string-of-all-happy-strings-of-length-n/discuss>)

JavaScript ▼



```
1 /**
2  * @param {number} n
3  * @param {number} k
4  * @return {string}
5  */
6 var getHappyString = function(n, k) {
7
8 };
```

☐ Custom Testcase☒ Use Example Testcases

Run

Submit

Copyright © 2020 LeetCode

[Help Center \(/support/\)](/support/) | [Terms \(/terms/\)](/terms/) | [Privacy Policy \(/privacy/\)](/privacy/)

[United States \(/region/\)](/region/)