2014. Longest Subsequence Repeated k Times

Description

You are given a string `s` of length `n`, and an integer `k`. You are tasked to find the **longest subsequence repeated** `k` times in string `s`.

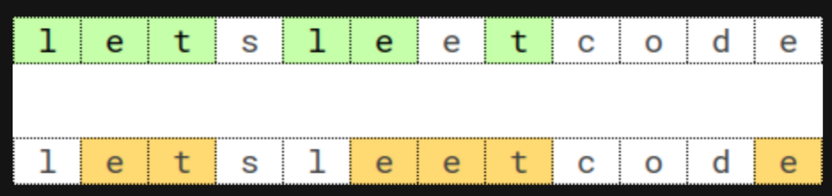
A **subsequence** is a string that can be derived from another string by deleting some or no characters without changing the order of the remaining characters.

A subsequence `seq` is **repeated** `k` times in the string `s` if `seq * k` is a subsequence of `s`, where `seq * k` represents a string constructed by concatenating `seq` `k` times.

- For example, `"bba"` is repeated `2` times in the string `"bababcba"`, because the string `"bbabba"`, constructed by concatenating `"bba"` `2` times, is a subsequence of the string `"b a bab c ba"`.

Return *the **longest subsequence repeated** `k` times in string `s`. If multiple such subsequences are found, return the **lexicographically largest** one. If there is no such subsequence, return an **empty** string*.

Example 1:




```
Input: s = "letsleetcode", k = 2
Output: "let"
Explanation: There are two longest subsequences repeated 2 times: "let" and "ete".
"let" is the lexicographically largest one.
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Example 2:

```
Input: s = "bb", k = 2
Output: "b"
Explanation: The longest subsequence repeated 2 times is "b".
```

Example 3:

```
Input: s = "ab", k = 2
Output: ""
Explanation: There is no subsequence repeated 2 times. Empty string is returned.
```

Constraints:

- `n == s.length`
- `2 <= n, k <= 2000`
- `2 <= n < k * 8`
- `s` consists of lowercase English letters.