

# 471. Encode String with Shortest Length Premium

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Given a string `s`, encode the string such that its encoded length is the shortest.

The encoding rule is: `k[encoded_string]`, where the `encoded_string` inside the square brackets is being repeated exactly `k` times. `k` should be a positive integer.

If an encoding process does not make the string shorter, then do not encode it. If there are several solutions, return **any of them**.

## Example 1:

**Input:** `s = "aaa"`

**Output:** `"aaa"`

**Explanation:** There is no way to encode it such that it is shorter than the input string, so we do not encode it.

## Example 2:

**Input:** `s = "aaaaa"`

**Output:** `"5[a]"`

**Explanation:** `"5[a]"` is shorter than `"aaaaa"` by 1 character.

## Example 3:

**Input:** `s = "aaaaaaaaaa"`

**Output:** `"10[a]"`

**Explanation:** `"a9[a]"` or `"9[a]a"` are also valid solutions, both of them have the same length = 5, which is the same as `"10[a]"`.

## Constraints:

- `1 <= s.length <= 150`
- `s` consists of only lowercase English letters.

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Yes

No

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