

1087. Brace Expansion

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Hint

You are given a string `s` representing a list of words. Each letter in the word has one or more options.

- If there is one option, the letter is represented as is.
- If there is more than one option, then curly braces delimit the options. For example, `"{a,b,c}"` represents options `["a", "b", "c"]`.

For example, if `s = "a{b,c}"`, the first character is always `'a'`, but the second character can be `'b'` or `'c'`. The original list is `["ab", "ac"]`.

Return all words that can be formed in this manner, **sorted** in lexicographical order.

Example 1:

Input: `s = "{a,b}c{d,e}f"`

Output: `["acdf","acef","bcdf","bcef"]`

Example 2:

Input: `s = "abcd"`

Output: `["abcd"]`

Constraints:

- `1 <= s.length <= 50`
- `s` consists of curly brackets `'{'`, `'}'`, commas `' '`, and lowercase English letters.
- `s` is guaranteed to be a valid input.
- There are no nested curly brackets.
- All characters inside a pair of consecutive opening and ending curly brackets are different.

Seen this question in a real interview before? 1/5

Yes

No

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Hint 1

All generated strings are of the same size. How can we generate all of these strings?

Hint 2

Do a backtracking on which each level of it has to choose one single (e.g. 'a') character or any character of the given parenthesized group (e.g. "{a,b,c}")

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