

## 87. Scramble String

Hard

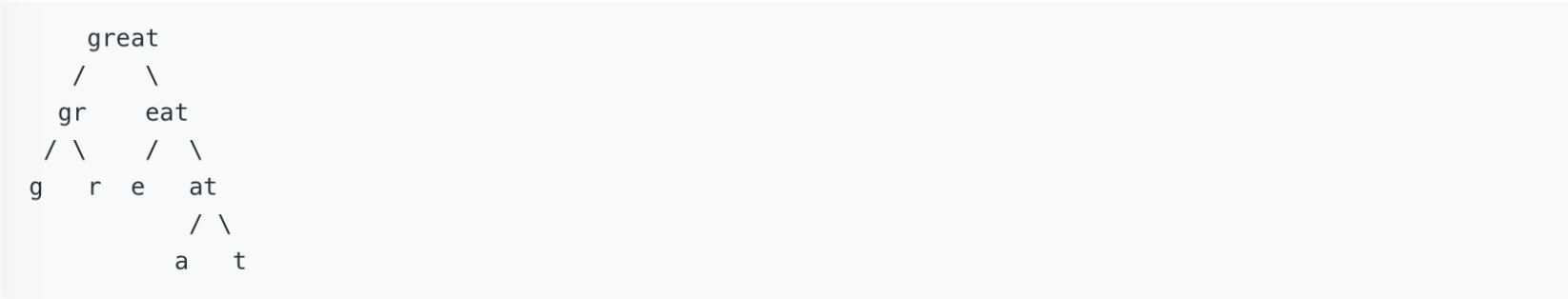
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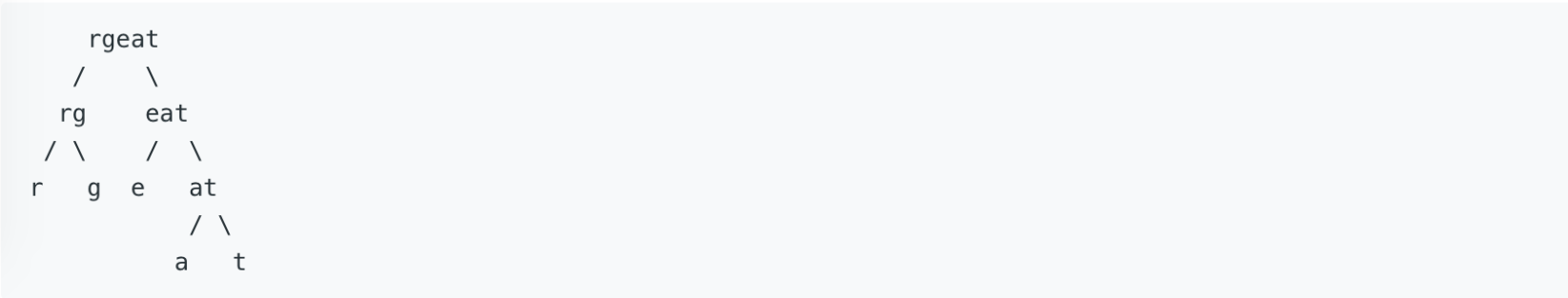
Given a string  $s1$ , we may represent it as a binary tree by partitioning it to two non-empty substrings recursively.

Below is one possible representation of  $s1 = \text{"great"}$  :



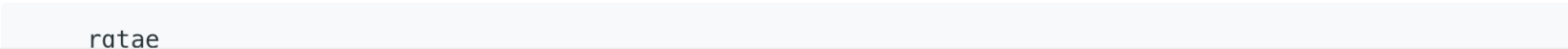
To scramble the string, we may choose any non-leaf node and swap its two children.

For example, if we choose the node `"gr"` and swap its two children, it produces a scrambled string `"rgeat"` .



We say that `"rgeat"` is a scrambled string of `"great"` .

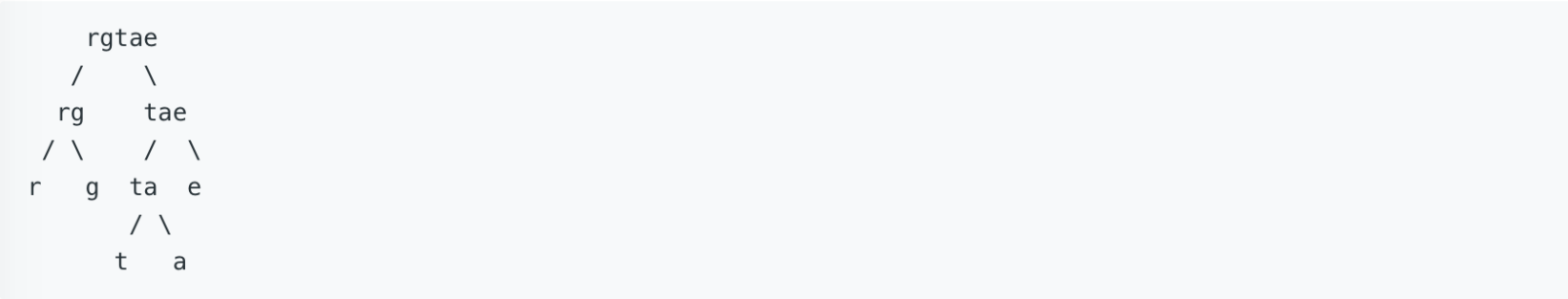
Similarly, if we continue to swap the children of nodes `"eat"` and `"at"` , it produces a scrambled string `"rgtae"` .



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We say that "rgeat" is a scrambled string of "great" .

Similarly, if we continue to swap the children of nodes "eat" and "at" , it produces a scrambled string "rgtae" .



We say that "rgtae" is a scrambled string of "great" .

Given two strings s1 and s2 of the same length, determine if s2 is a scrambled string of s1.

Example 1:

Input: s1 = "great", s2 = "rgeat"

Output: true

Example 2:

Input: s1 = "abcde", s2 = "caebd"

Output: false

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Seen this question in a real interview before?

Yes

No

Contributors