

### Question # 11

#### Description:

#### Pattern Matcher

Difficulty: Medium    Category: String

You're given two non-empty strings. The first one is a pattern consisting of only "x" s and / or "y" s; the other one is a normal string of alphanumeric characters. Write a function that checks whether the normal string matches the pattern. A string S0 is said to match a pattern if replacing all "x" s in the pattern with some non-empty substring S1 of S0 and replacing all "y" s in the pattern with some non-empty substring S2 of S0 yields the same string S0 . If the input string doesn't match the input pattern, the function should return an empty array; otherwise, it should return an array holding the strings S1 and S2 that represent "x" and "y" in the normal string, in that order. If the pattern doesn't contain any "x" s or "y" s, the respective letter should be represented by an empty string in the final array that you return. You can assume that there will never be more than one pair of strings S1 and S2 that appropriately represent "x" and "y" in the normal string.

#### Sample Input

pattern = "xyxyxy" string = "gogopowerrangergogopowerranger"

#### Sample Output

["go", "powerranger"]

#### Directions :

- Solve the problem on your own.
- No group effort.
- If possible, provide more than one solution/strategy.
- Different approaches will be great for discussion.
- If you are stuck no problem. Student will experience the same.
- **Do not google it.** Try to build your own solution. It might be ugly no worries.
- We will discuss it on 12<sup>th</sup> November 2021 10:30 EST.

**Good luck!**

**Fatih**