

Our Solution(s)

Run Code

Your Solutions

Run Code

Solution 1

```
1 # Copyright © 2020 AlgoExpert, LLC. All rights reserved.
2
3 # O(n^2 + m) time | O(n + m) space
4 def patternMatcher(pattern, string):
5     if len(pattern) > len(string):
6         return []
7     newPattern = getNewPattern(pattern)
8     didSwitch = newPattern[0] != pattern[0]
9     counts = {"x": 0, "y": 0}
10    firstYPos = getCountsAndFirstYPos(newPattern, counts)
11    if counts["y"] != 0:
12        for lenOfX in range(1, len(string)):
13            lenOfY = (len(string) - lenOfX * counts["x"]) / counts["y"]
14            if lenOfY <= 0 or lenOfY % 1 != 0:
15                continue
16            lenOfY = int(lenOfY)
17            yIdx = firstYPos * lenOfX
18            x = string[:lenOfX]
19            y = string[yIdx : yIdx + lenOfY]
20            potentialMatch = map(lambda char: x if char == "x" else y,
21                                if string == "".join(potentialMatch):
22                                    return [x, y] if not didSwitch else [y, x]
23    else:
24        lenOfX = len(string) / counts["x"]
25        if lenOfX % 1 == 0:
26            lenOfX = int(lenOfX)
27            x = string[:lenOfX]
28            potentialMatch = map(lambda char: x, newPattern)
29            if string == "".join(potentialMatch):
30                return [x, ""] if not didSwitch else ["", x]
31    return []
32
33
```

Solution 1   Solution 2   Solution 3

```
1 def patternMatcher(pattern, string):
2     # Write your code here.
3     pass
4
```

Our Tests

Custom Output

Submit Code

```
10 # Add labels to each
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```

Run or submit code when you're ready.