

Our Solution(s)

Run Code

Your Solutions

Run Code

Solution 1

Solution 2

Solution 3

```
1 // Copyright © 2020 AlgoExpert, LLC. All rights reserved.
2
3 // O(b^2 + ns) time | O(b^2 + n) space
4 function multiStringSearch(bigString, smallStrings) {
5   const modifiedSuffixTrie = new ModifiedSuffixTrie(bigString);
6   return smallStrings.map(string => modifiedSuffixTrie.contains(string));
7 }
8
9 class ModifiedSuffixTrie {
10   constructor(string) {
11     this.root = {};
12     this.populateModifiedSuffixTrieFrom(string);
13   }
14
15   populateModifiedSuffixTrieFrom(string) {
16     for (let i = 0; i < string.length; i++) {
17       this.insertSubstringStartingAt(i, string);
18     }
19   }
20
21   insertSubstringStartingAt(i, string) {
22     let node = this.root;
23     for (let j = i; j < string.length; j++) {
24       const letter = string[j];
25       if (!(letter in node)) node[letter] = {};
26       node = node[letter];
27     }
28   }
29
30   contains(string) {
31     let node = this.root;
32     for (const letter of string) {
33       if (!(letter in node)) return false;
```

```
1 function multiStringSearch(bigString, smallStrings) {
2   // Write your code here.
3 }
4
5 // Do not edit the line below.
6 exports.multiStringSearch = multiStringSearch;
7
```

Our Tests

Custom Output

Submit Code

```
1 const bigString = "abcdefghijklllmllmn";
2 const smallStrings = ["ace", "f", "j", "k", "l", "m", "n"];
3
4 // Test Case 01: Expected: true
5 //
6 // multiStringSearch(multiStringSearch, bigString, smallStrings) // true
7 // multiStringSearch(multiStringSearch, bigString, smallStrings) // true
8 // multiStringSearch(multiStringSearch, bigString, smallStrings) // true
9 // multiStringSearch(multiStringSearch, bigString, smallStrings) // true
10 // multiStringSearch(multiStringSearch, bigString, smallStrings) // true
11 // multiStringSearch(multiStringSearch, bigString, smallStrings) // true
```

Run or submit code when you're ready.