

PromptScratchpadOur Solution(s)Video Explanation

Run Code

Solution 1Solution 2Solution 3

```
1 // Copyright © 2020 AlgoExpert, LLC. All rights reserved.
2
3 package main
4
5 // O(b^2 + ns) time | O(b^2 + n) space
6 func MultiStringSearch(bigString string, smallStrings []string) []bool {
7     trie := NewTrie(bigString)
8     output := make([]bool, len(smallStrings))
9     for i, smallString := range smallStrings {
10         output[i] = trie.Contains(smallString)
11     }
12     return output
13 }
14
15 type ModifiedSuffixTrie map[byte]ModifiedSuffixTrie
16
17 func NewTrie(str string) ModifiedSuffixTrie {
18     trie := ModifiedSuffixTrie{}
19     for i := range str {
20         trie.Add(str, i)
21     }
22     return trie
23 }
24
25 func (trie ModifiedSuffixTrie) Add(str string, startIndex int) {
26     node := trie
27     for j := startIndex; j < len(str); j++ {
28         letter := str[j]
29         if _, found := node[letter]; !found {
30             node[letter] = ModifiedSuffixTrie{}
31         }
32         node = node[letter]
33     }
34 }
35
36 func (trie ModifiedSuffixTrie) Contains(str string) bool {
37     node := trie
38     for i := range str {
39         letter := str[i]
40         if _, found := node[letter]; !found {
41             return false
42         }
43         node = node[letter]
44     }
45     return true
46 }
47
```