

PromptScratchpadOur Solution(s)Video Explanation

Run Code

Solution 1Solution 2Solution 3

```
1 // Copyright © 2020 AlgoExpert, LLC. All rights reserved.
2
3 // O(bns) time | O(n) space
4 function multiStringSearch(bigString, smallStrings) {
5   return smallStrings.map(smallString => isInBigString(bigString, smallString));
6 }
7
8 function isInBigString(bigString, smallString) {
9   for (let i = 0; i < bigString.length; i++) {
10     if (i + smallString.length > bigString.length) break;
11     if (isInBigStringHelper(bigString, smallString, i)) return true;
12   }
13   return false;
14 }
15
16 function isInBigStringHelper(bigString, smallString, startIdx) {
17   let leftBigIdx = startIdx;
18   let rightBigIdx = startIdx + smallString.length - 1;
19   let leftSmallIdx = 0;
20   let rightSmallIdx = smallString.length - 1;
21   while (leftBigIdx <= rightBigIdx) {
22     if (bigString[leftBigIdx] != smallString[leftSmallIdx] || bigString[rightBigIdx] != smallString[rightSmallIdx]) {
23       return false;
24     }
25     leftBigIdx++;
26     rightBigIdx--;
27     leftSmallIdx++;
28     rightSmallIdx--;
29   }
30   return true;
31 }
32
33 exports.multiStringSearch = multiStringSearch;
34
```