Prompt   Scratchpad   Our Solution(s)   Video Explanation   Run Code

Solution 1   Solution 2   Solution 3

```csharp
// Copyright © 2020 AlgoExpert, LLC. All rights reserved.

using System.Collections.Generic;

public class Program {
  // O(bns) time | O(n) space
  public static List<bool> MultistringSearch(string bigstring, string[] smallstrings) {
    List<bool> solution = new List<bool>();
    foreach (string smallstring in smallstrings) {
      solution.Add(isInBigstring(bigstring, smallstring));
    }
    return solution;
  }

  public static bool isInBigstring(string bigstring, string smallstring) {
    for (int i = 0; i < bigstring.Length; i++) {
      if (i + smallstring.Length > bigstring.Length) {
        break;
      }
      if (isInBigstring(bigstring, smallstring, i)) {
        return true;
      }
    }
    return false;
  }

  public static bool isInBigstring(string bigstring, string smallstring, int startIdx) {
    int leftBigIdx = startIdx;
    int rightBigIdx = startIdx + smallstring.Length - 1;
    int leftSmallIdx = 0;
    int rightSmallIdx = smallstring.Length - 1;
    while (leftBigIdx <= rightBigIdx) {
      if (
        bigstring[leftBigIdx] != smallstring[leftSmallIdx] ||
        bigstring[rightBigIdx] != smallstring[rightSmallIdx]
      ) {
        return false;
      }
      leftBigIdx++;
      rightBigIdx--;
      leftSmallIdx++;
      rightSmallIdx--;
    }
    return true;
  }
}
```