

Our Solution(s)

Run Code

Your Solutions

Run Code

Solution 1

```
1 // Copyright © 2020 AlgoExpert, LLC. All rights reserved.
2
3 package main
4
5 import "math"
6
7 // O(b + s) time | O(b + s) space - where b is the length of the big
8 // input string and s is the length of the small input string
9 func SmallestSubstringContaining(bigString, smallString string) string
10     targetCharCounts := getCharCounts(smallString)
11     substringBounds := getSubstringBounds(bigString, targetCharCounts)
12     return getStringFromBounds(bigString, substringBounds)
13 }
14
15 func getCharCounts(str string) map[byte]int {
16     charCounts := map[byte]int{}
17     for _, char := range str {
18         increaseCharCount(byte(char), charCounts)
19     }
20     return charCounts
21 }
22
23 func getSubstringBounds(str string, targetCharCounts map[byte]int) []int {
24     substringBounds := []int{0, math.MaxInt32}
25     substringCharCounts := map[byte]int{}
26     numUniqueChars := len(targetCharCounts)
27     numUniqueCharsDone := 0
28     leftIdx := 0
29     rightIdx := 0
30
31     // Move the rightIdx to the right in the string until you've counted
32     // all of the target characters enough times.
33     for rightIdx < len(str) {
```

Solution 1 Solution 2 Solution 3

```
1 package main
2
3 func SmallestSubstringContaining(bigString, smallString string) string
4     // Write your code here.
5     return ""
6 }
7
```

Our Tests

```
1 // Test 1
2 // Input: bigString = "adbbcb", smallString = "abc"
3 // Output: "adbbcb"
4
5 // Test 2
6 // Input: bigString = "adbbcb", smallString = "adbbcb"
7 // Output: "adbbcb"
8
9 // Test 3
10 // Input: bigString = "adbbcb", smallString = "adbbcb"
11 // Output: "adbbcb"
```

Custom Output

Submit Code

```
1
2
3
```

```
1 # In this exercise, you'll use a list comprehension to create a list of the
2 # squares of the numbers 1 through 10.
3 # Create a list of the squares of the numbers 1 through 10 using a list
4 # comprehension.
5 # Print out the list, which you'll call squares.
6
7 # Your code goes here
```

Run or submit code when you're ready.

```
1 # In this exercise, you'll use a list comprehension to create a list of the
2 # squares of the numbers 1 through 10.
3 # Create a list of the squares of the numbers 1 through 10 using a list
4 # comprehension.
5 # Print out the list, which you'll call squares.
```