

Our Solution(s)

Run Code

Your Solutions

Run Code

Solution 1

```
1 // Copyright © 2020 AlgoExpert, LLC. All rights reserved.
2
3 class Program {
4     // O(n) time | O(min(n, a)) space
5     func longestSubstringWithoutDuplication(_ string: String) -> String {
6         var startingPointer = 0
7         var indicesOfLongestSubstring = [0, 1]
8         var indicesDictionary = [Character: Int]()
9
10        for (index, character) in string.enumerated() {
11            if let index = indicesDictionary[character] {
12                startingPointer = max(startingPointer, index + 1)
13            }
14
15            if indicesOfLongestSubstring[1] - indicesOfLongestSubstring[0] < index - startingPointer + 1 {
16                indicesOfLongestSubstring = [startingPointer, index + 1]
17            }
18
19            indicesDictionary[character] = index
20        }
21
22        let start = indicesOfLongestSubstring[0]
23        let startIndex = string.index(string.startIndex, offsetBy: start)
24
25        let end = indicesOfLongestSubstring[1]
26        let endIndex = string.index(string.startIndex, offsetBy: end)
27
28        return String(string[startIndex ..< endIndex])
29    }
30 }
31
```

Solution 1

Solution 2

Solution 3

```
1 class Program {
2     func longestSubstringWithoutDuplication(_ string: String) -> String {
3         // Write your code here.
4         return ""
5     }
6 }
7
```

Our Tests

Custom Output

Submit Code

```
1 class Program {
2     func longestSubstringWithoutDuplication(_ string: String) -> String {
3         // Write your code here.
4         return ""
5     }
6 }
7
```

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27
28        return String(string[startIndex ..< endIndex])
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```

Run or submit code when you're ready.