

# Problem 3: Longest Substring Without Repeating Characters

## Problem Information

**Difficulty:** Medium

**Acceptance Rate:** 37.91%

**Paid Only:** No

**Tags:** Hash Table, String, Sliding Window

## Problem Description

Given a string `s`, find the length of the **longest** **substring** without duplicate characters.

**Example 1:**

**Input:** s = "abcabcbb" **Output:** 3 **Explanation:** The answer is "abc", with the length of 3. Note that "bca" and "cab" are also correct answers.

**Example 2:**

**Input:** s = "bbbbbb" **Output:** 1 **Explanation:** The answer is "b", with the length of 1.

**Example 3:**

**Input:** s = "pwwkew" **Output:** 3 **Explanation:** The answer is "wke", with the length of 3. Notice that the answer must be a substring, "pwke" is a subsequence and not a substring.

**Constraints:**

\* `0 <= s.length <= 5 \* 104` \* `s` consists of English letters, digits, symbols and spaces.

## Code Snippets

**C++:**

```
class Solution {  
public:  
    int lengthOfLongestSubstring(string s) {  
  
    }  
};
```

**Java:**

```
class Solution {  
public int lengthOfLongestSubstring(String s) {  
  
}  
}
```

**Python3:**

```
class Solution:  
    def lengthOfLongestSubstring(self, s: str) -> int:
```