# 3. Longest Substring Without Repeating Characters

# Description

Given a string s, find the length of the longest substring without repeating characters.

#### **Example 1:**

```
Input: s = "abcabcbb"
Output: 3
Explanation: The answer is "abc", with the length of 3.
```

#### Example 2:

```
Input: s = "bbbbb"
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:**

- $0 \le \text{s.length} \le 5 * 10^4$
- s consists of English letters, digits, symbols and spaces.