# 3. Longest Substring Without Repeating Characters

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