

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 = "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.

Example 4:

Input: `s = ""`

Output: 0

Constraints:

- $0 \leq s.length \leq 5 * 10^4$
- `s` consists of English letters, digits, symbols and spaces.