1. Given a string, find the length of the longest substring without repeating characters. For example, the longest substring without repeating letters for "abcabcbb" is "abc", which the length is 3. For "bbbbb" the longest substring is "b", with the length of 1.
2. Given an unsorted array, find the max length of subsequence in which the numbers are in incremental order.

For example: If the input array is {7, 1, 2, 3, 1, 2, 5, 8, 9, 6}, a subsequence with the most numbers in incremental order is {1, 2, 3, 5, 8, 9} and the expected output is 6.

1. Given 2 strings, return the longest substring that belongs to both strings.
2. Given a string, that contains special character together with alphabets (‘a’ to ‘z’ and ‘A’ to ‘Z’), reverse the string in a way that special characters are not affected.  
   Examples:  
   Input: str = "a,b$c"  
   Output: str = "c,b$a"  
     
   OR  
     
   Input: str = "Ab,c,de!$"  
   Output: str = "ed,c,bA!$"
3. Given an array of integers, replace every number with the next higher number to its right. If a number can’t be replaced, we leave it as-it is.

For example, the list: 5, 2, 1, 4, 6, 7 needs to be changed to 6, 4, 4, 6, 7, 7.

1. Find out if a string has all unique characters
2. Validate a string that uses opening/closing brackets. All opening brackets should have a closing bracket. Also brackets come in three different shapes: (, {, and [. Opening/closing pares should come in the correct order.

For instance,

The string below is valid:

{dfgh}gh[45yh]()

This is an invalid string:

{(erty}[fgh{ty}[rty)

1. Get department, no of employees in a department, total salary with respect to a department from employee table order by total salary descending.
2. Given an expression string exp , write a program to examine whether the pairs and the orders of “{“,”}”,”(“,”)”,”[“,”]” are correct in exp. For example, the program should print true for exp = “[()]{}{[()()]()}” and false for exp = “[(])”
3. **Select 4th Highest salary from employee table**
4. https://stackoverflow.com/questions/41752447/find-index-k-at-which-the-number-of-opening-and-closing-brackets-is-the-same