

014 Longest Common Prefix

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Question:

Write a function to find the longest common prefix string amongst an array of strings.

来自 <https://leetcode.com/problems/longest-common-prefix/description/>

编写一个函数来查找字符串数组中最长的公共前缀字符串。

Solution for Python3:

```
1 class Solution:
2     def longestCommonPrefix(self, strs):
3         """
4         :type strs: List[str]
5         :rtype: str
6         """
7         if not strs:
8             return ''
9         L = len(strs[0])
10        for s in strs:
11            L = min(len(s), L)
12        for i in range(L):
13            for j in range(len(strs)-1):
14                if strs[j][i] != strs[j + 1][i]:
15                    return strs[j][:i]
16        return strs[0][:L]
```

```
1 class Solution:
2     def longestCommonPrefix(self, strs):
3         """
4         :type strs: List[str]
5         :rtype: str
6         """
7         pre = ''
8         i = 0
9         while strs:
10            for j in range(len(strs)):
11                if (i >= len(strs[j])) or (j > 0 and strs[j-1][i] != strs[j][i]):
12                    return pre
13            pre += strs[0][i]
14            i += 1
15        return pre
```

Solution for C++:

```
1 class Solution {
2 public:
3     string longestCommonPrefix(vector<string>& strs) {
4         string pre = "";
5         for (int i = 0; strs.size() > 0; pre += strs[0][i++]) {
6             for (int j = 0; j < strs.size(); j++) {
7                 if (i >= strs[j].size() || (j > 0 && strs[j][i] != strs[j-1][i])) {
8                     return pre;
9                 }
10            }
11        }
```

```
11         }  
12     return pre;  
13 }  
14 };
```

Appendix:

罗纵向检查每个字符串的第一个字符，第二个字符，。。。，最短字符串长度个字符。

边界条件：空字符串数组，单个字符串数组。