

344 Reverse String

2018年4月9日 19:49

Question:

Write a function that takes a string as input and returns the string reversed.

Example:

Given s = "hello", return "olleh".

来自 <<https://leetcode.com/problems/reverse-string/description/>>

请编写一个函数，其功能是将输入的字符串反转过来。

示例:

输入: s = "hello"

返回: "olleh"

Solution for Python3:

```
1  class Solution1:
2      def reverseString(self, s):
3          """
4          :type s: str
5          :rtype: str
6          """
7          return s[::-1]
8
9  class Solution2:
10     def reverseString(self, s):
11         """
12         :type s: str
13         :rtype: str
14         """
15         l = len(s)
16         if l < 2:
17             return s
18         return self.reverseString(s[l//2:]) + self.reverseString(s[:l//2])
19
20 class Solution3:
21     def reverseString(self, s):
22         """
23         :type s: str
24         :rtype: str
25         """
26         r = list(s)
27         i, j = 0, len(s) - 1
28         while i < j:
29             r[i], r[j] = r[j], r[i]
30             i += 1
31             j -= 1
32         return ''.join(r)
```

Solution for C++:

```
1  class Solution1 {
2  public:
3      string reverseString(string s) {
4          int i = 0, j = s.size() - 1;
5          while (i < j) {
6              swap(s[i++], s[j--]);
7          }
8          return s;
9      }
10 };
11
12 class Solution2 {
13 public:
14     string reverseString(string s) {
15         reverse(s.begin(), s.end());
16         return s;
17     }
18 };
```

Appendix:

Python 中数字，元组和字符串是不可变对象，不能通过索引改变。
而列表list可以通过索引改变。