009 Palindrome Number

2018年3月28日　18:37

Question:

Determine whether an integer is a palindrome. Do this without extra space.

来自 <https://leetcode.com/problems/palindrome-number/description/>

判断一个整数是否是回文数。不能使用辅助空间。

Solution for Python3:

```python
class Solution:
    def isPalindrome(self, x):
        """
        :type x: int
        :rtype: bool
        """
        if (x < 0) or (x != 0 and x % 10 == 0):
            return False
        sum = 0
        while x > sum:
            sum = sum * 10 + x % 10
            x //= 10
        return (x == sum) or (x == sum // 10)
```

Solution for C++:

```cpp
class Solution {
public:
    bool isPalindrome(int x) {
        if (x < 0 || (x != 0 && x % 10 == 0)) {
            return false;
        }
        int sum = 0;
        while (x > sum) {
            sum = sum * 10 + x % 10;
```

```
10              x /= 10;
11          }
12          return (x == sum) || (x == sum / 10);
13      }
14  };
```

Appendix:

Python的与或非表示：and,or,not

Python3普通除法(/)和整除(//)

边界条件：负数，0，一位整数，10的倍数