

9. Palindrome Number

Some hints:

Could negative integers be palindromes? (ie, -1)

no

If you are thinking of converting the integer to string, note the **restriction of using extra space**.

You could also try reversing an integer. However, if you have solved the problem "Reverse Integer", you know that the **reversed integer might overflow**. How would you handle such case?

There is a more generic way of solving this problem.

现在让我们考虑如何恢复上一半的数字。对于号码 1221，如果我们这样做 $1221 \% 10$ ，我们得到最后一个数字 1，得到第二个数字，我们需要删除最后一个数字 1221，我们可以通过将它除以 10 来实现 $1221 / 10 = 122$ 。然后我们可以通过将模数乘以 10 得到最后一个数字 $122 \% 10 = 2$ ，如果我们将最后一位乘以 10，并添加第二个最后一个数字 $1 * 10 + 2 = 12$ ，则它给出我们想要的还原数。继续这个过程将给我们更多的数字的恢复的数字。

```
class Solution(object):
    def isPalindrome(self, x):
        if x<0:
            return False
        elif x==0:
            return True
        temp=x
        y=0
        while x:

            y = y*10 + x%10;
            x=x/10
        if temp==y:
            return True
        else:
            return False
```

附上刚开始学习 Python 时练习的用 Queue 的回文检测办法

palindromic letter checking 回文检测

```
import collections
def palCheck(string):
    equal=True
    palDeque = collections.deque()
    for char in string:
        palDeque.appendleft(char)
    while palDeque.__len__(>1 and equal :
        front= palDeque.pop()
        rear = palDeque.popleft()
        if front!= rear:
            return False
    return equal
```