007 Reverse Integer

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Question:

Given a 32-bit signed integer, reverse digits of an integer.
给出一个32位的有符号整数，反转该整数的数字部分。
Example:
Input: 123
Output: 321
Input: -123
Output: -321
Input: 120
Output: 21
Note:
Assume we are dealing with an environment which could only hold integers within the 32-bit signed integer range. For the purpose of this problem, assume that your function returns 0 when the reversed integer overflows.

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

Solution for Python3:

```python
class Solution:
    def reverse(self, x):
        """
        :type x: int
        :rtype: int
        """
        c = (x > 0) - (x < 0)
        t = int(str(c*x)[::-1])
        return c * t * (t < 2**31)
```

Solution for C++:

```cpp
class Solution {
public:
    int reverse(int x) {
       long t = 0;
       while ( x != 0) {
           t = t * 10 + x % 10;
           x /= 10;
```

```
        }
        return (int(t) == t) * t;
    }
};
```

Appendix:

一个数x>0, =0 , <0分别用1,0,-1表示

1) t = (x > 0) - (x < 0)