

9 Palindrome Number (link)

Description

Given an integer x , return `true` *if x is a **palindrome**, and* `false` *otherwise*.

Example 1:

Input: $x = 121$

Output: `true`

Explanation: 121 reads as 121 from left to right and from right to left.

Example 2:

Input: $x = -121$

Output: `false`

Explanation: From left to right, it reads -121. From right to left, it becomes 121-.

Example 3:

Input: $x = 10$

Output: `false`

Explanation: Reads 01 from right to left. Therefore it is not a palindrome.

Constraints:

- $-2^{31} \leq x \leq 2^{31} - 1$

Follow up: Could you solve it without converting the integer to a string?

(scroll down for solution)

Solution

Language: *cpp*

Status: Accepted

```
class Solution {
public:
    bool isPalindrome(int x) {

        if (x < 0) {
            return false;
        }

        int original = x;
        long long reversed = 0;

        while (x > 0) {
            int digit = x % 10;
            reversed = reversed * 10 + digit;
            x /= 10;
        }

        return original == reversed;
    }
};
```