

9. Palindrome Number

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-. Therefore it is not a palindrome.

Example 3:

Input: $x = 10$

Output: false

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

Constraints:

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

① What is a Palindrome number

121 Let's reverse it and you'll get
121. Same

-121 Let's reverse it and you'll get
121- Not Same

Code:

* Setting up a while loop with condition (number != 0). because we are going to reverse the number and store it in another variable reverse.

The we compare if (reverse == number) if that's true that means given number is a Palindrome number

Special case:

We always check that given number is greater than 0. If not so, we return False.

i.e. -121, -1, -2, -4 (They never be palindrome because of -sign)

Condition ~~if~~ if (number < 0)
return False;

Code.

```
class Solution {  
    public boolean isPalindrome(int x) {  
        int reverse;  
        int temp = x;  
        if(x < 0)  
            return false;  
        else if(x == 0)  
            return true;  
        else{  
            reverse = 0;  
            while(temp != 0){  
                reverse = reverse * 10 + temp%10;  
                temp/=10;  
            }  
            return reverse == x;  
        }  
    }  
}
```