

# 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 Lets reverse it and you'll get  
121. Same

... -121 Lets 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.

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

Special case:

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

$\therefore -121, -1, -2, -4$  (They never be palindromes because of - sign)

Condition ~~if (number < 0)~~ 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;  
    }  
}
```