9. Palindrome Number

Total Accepted: **97603** Total Submissions: **323644** Difficulty: **Easy**

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for example 9889 is a palindrome
First we need to consider how to pick up the first and the last digit
Notice that
9889 // 1000 = 9, is the first digit,
868 // 100 = 8, is the first digit
66 // 10 = 6, is the first digit
Any idea?
to get the first digit:
div = 1
while number / div >= 10:
div *= 10
div then become the divider for us to obtain the first digit.

Also, 9889 % 10 = 9 is the last digit.

Then 9889 % 1000 = 889, are the rest of the three digit
and 889 // 10 = 88,
Any idea?
we can do the following things to get rid of the first and the last digit from 9889
(9889 % 1000) // 10 = 88

summary:
x % 10 => last digit
x // div => first digit
x %div => remove the first digit
x // 10 => remove the last digit
(x%div) // 10 => remove the first and then the last digit

now we can start coding:

Here is how we can analysis the problem
123454321 -> 2345432 -> 34543 -> 454 and so on

Code:

```python
class Solution(object):
    def isPalindrome(self, x):

        if x < 0:
            return False

        div = 1
        while x // div >= 10:
            div *= 10

        while x > 0:
            first = x//div   #obtain the first digit
            last = x % 10  #obtain the last digit
            if first != last:
                return False
            x = (x%div) // 10  # get rid of the first and the last digit
            div = div // 100  # update the divider correspondingly.

        return True
```