Palindrome Number

9. Palindrome Number

Easy | Topics | Companies | Hint

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.

explaination:

1331 → **1331**

on reverse of this same no exist

is known as **palindrome** .

Thinking approach:

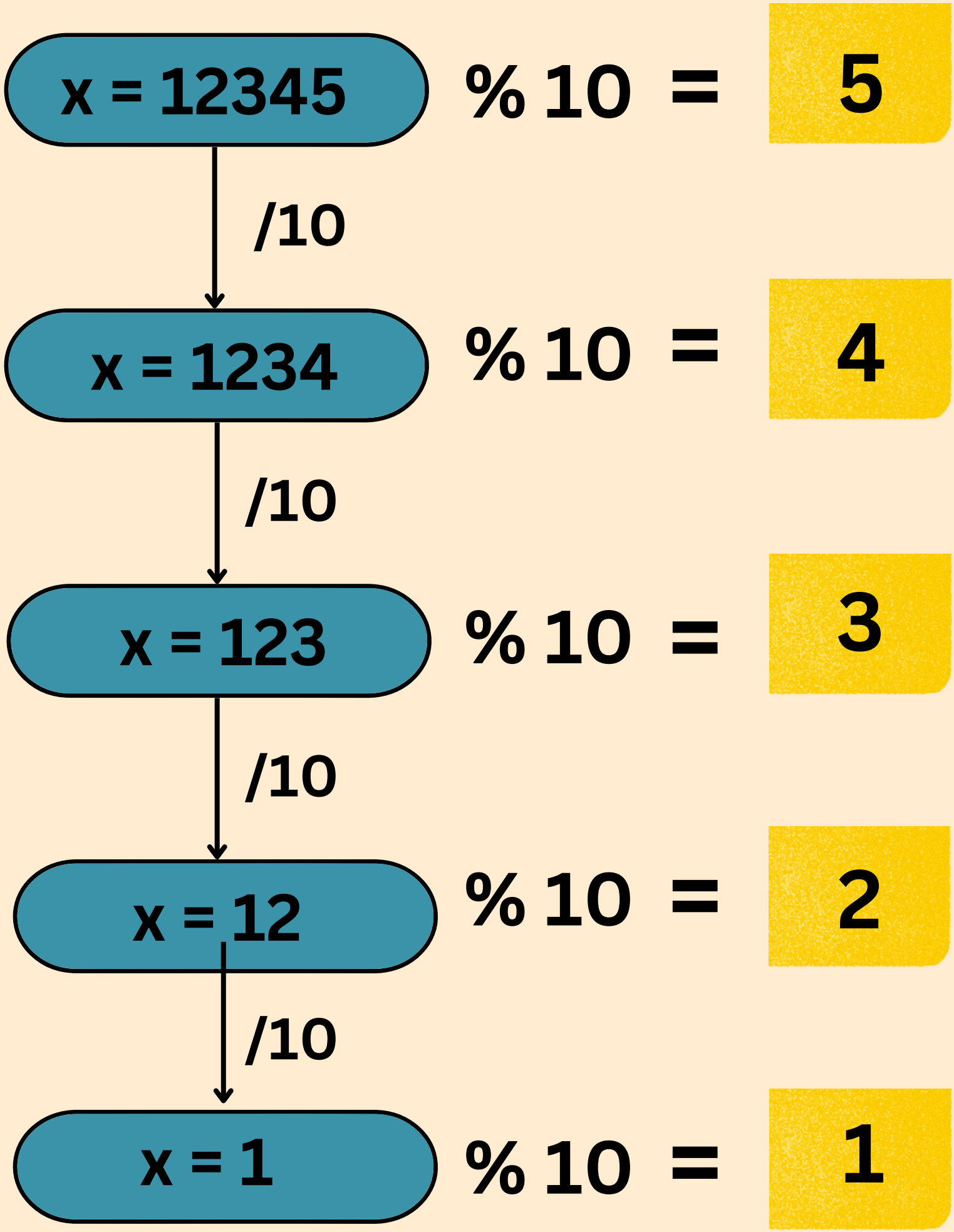
given a number, reverse of number is ***palindrome***.

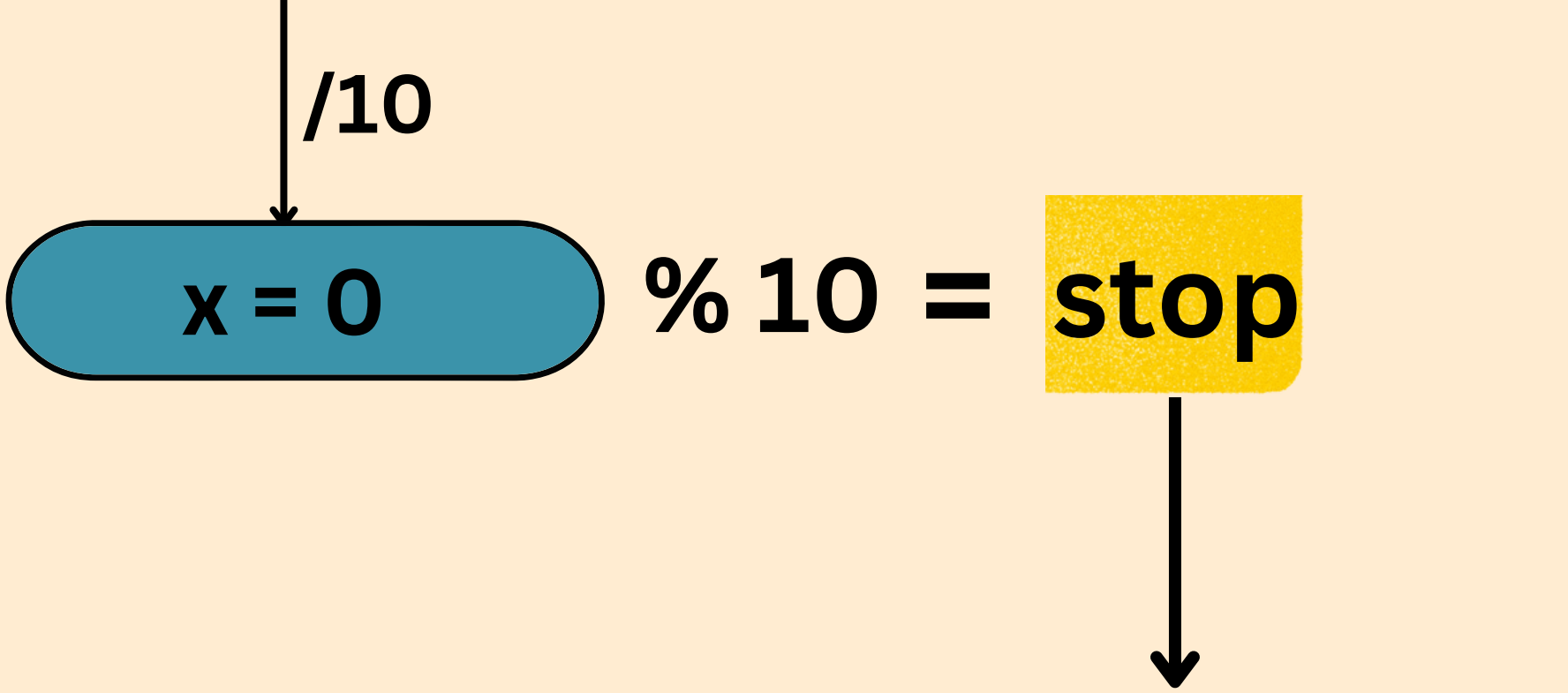
- ***so, can you generate reverse of number from given number.***
- ***after generating reverse of a number, and compare from original number.***

example:

x = 12345

- first step reverse of above number.


x = 12345
% 10 = 5
/10
x = 1234
% 10 = 4
/10
x = 123
% 10 = 3
/10
x = 12
% 10 = 2
/10
x = 1
% 10 = 1



int rev_no = 54321

store these no into some variable

let’s code it:

solution below:

C++ Auto

```cpp
class Solution {
public:
    bool isPalindrome(int x) {
        if(x  < 0)
        {
            return false;
        }

        long long rev_no = 0;
        long long curr_no = x;

        while(curr_no != 0)
        {
            int last_digit = curr_no % 10;
            rev_no = rev_no * 10 + last_digit;
            curr_no = curr_no/10;
        }
        if(rev_no == x)
        {
            return true;
        }
        return false;
    }
};
```

code in c++

Code

Java Auto

```java
class Solution {
    public boolean isPalindrome(int x) {
        if( x < 0)
        {
            return false;
        }
        long rev_no = 0;
        long curr_no = x;

        while(curr_no != 0)
        {
            int last_digit = (int) (curr_no % 10);
            rev_no = rev_no*10 + last_digit;
            curr_no = curr_no / 10;
        }

        if(rev_no == x)
        {
            return true;
        }
        return false;
    }
}
```

code in java

Accepted Runtime: 0 ms

• Case 1 • Case 2 • Case 3

Input

x =

121

Output

```
true
```

Expected

```
true
```

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https://www.linkedin.com/in/manish-kumar-689905213/

manishkumar_978