❖Integer Palindrome:

Explanation: -

The integer palindrome problem involves determining whether a given integer reads the same forwards and backwards. For instance, the number 121 is a palindrome, while 123 is not. The solution typically requires handling special cases, such as negative numbers and numbers that end in zero, which cannot be palindromes unless they are zero itself.

Time Complexity: - O(n)

Space Complexity: - O(n)

```
   Start
    |
    v
Input Integer
    |
    v
Check if (number < 0 OR (number % 10 == 0 AND number != 0))
    |
   / \
  /   \
 false  true
  |    |
  v    v
Output: "false"
  |    |
  |    v
  | Call checkPalindrome(number, number)
  |    |
  |    v
  | In checkPalindrome(cnumber, original)
  |    |
  | If cnumber == 0?
  |    |
```

```
|   / \
|  /   \
| true  false
| |    |
| |      v
| |  Initialize reversed = 0
| |    |
| |  Loop to reverse the number
| |    |
| |  Check if original == reversed?
| |    |
| |   / \
| |  /   \
| | true   false
| | |    |
| | |      v
| |  | Output: "false"
| | |
| |  v
| | Output: "true"
| |
v   v
End
```