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Date: 14th July, 2022

Palindrome sequencing

Statement: A palindrome is a sequence that reads the same backward as forward. Given a string n representing an integer, return the closest integer (not including itself), which is a palindrome. If there is a tie, return the smaller one.

Assumptions:

1. If input string is empty/blank/null, it is invalid input. Hence, the program will return "Invalid String" error.
    a. E.g. input = "", output = "Invalid String".
2. If input string is one character long, then the program should return the same string. Single character is always palindrome.
    a. E.g. input = "9", output = "9"

Input-Output:

1. Inputs: String
2. Input File: TestCase.csv
3. Output: String
4. Output File: TestOutput-<yyyy-MM-dd>.csv

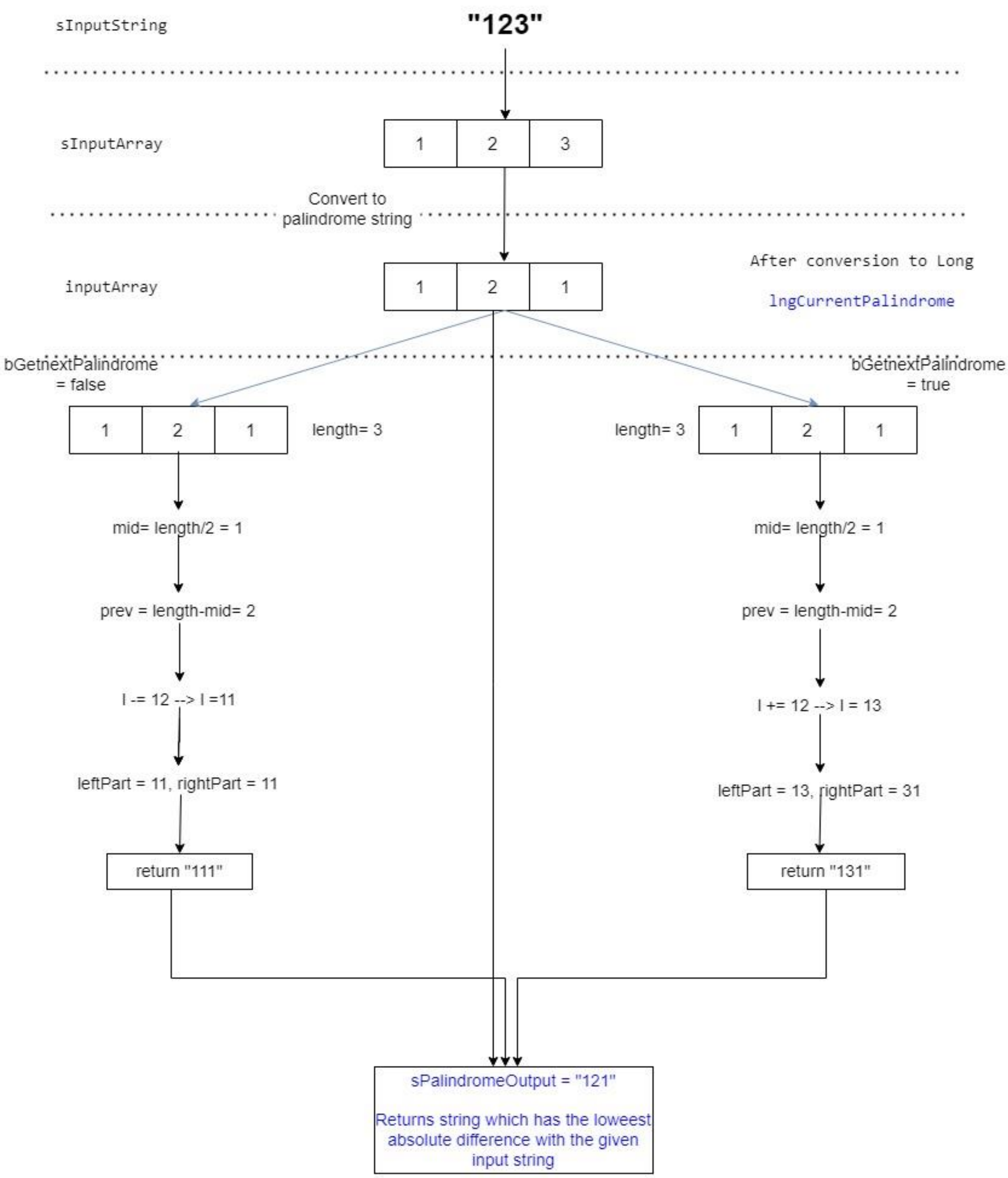
TestCase.csv:

a. Test Case No. <String>
b. Inputs <String>
c. Expected Results <String>

TestOutput-< yyyy-MM-dd>.csv:

a. Test Case No. <String>
b. Inputs <String>
c. Expected Results <String>
d. Actual Results <String>
e. Status <String>

Algorithm Breakdown:



Step-1: Convert the string to charArray. Generate palindrome number from the given input string.

Step-2: Generate closest previous palindrome number.

Step-3: Generate closest next palindrome number.

Step-4: Find the absolute difference among all the numbers.

Step-5: Return the number with the smallest difference.

File Operations:

1. Reads the inputs from the TestCase.csv file.
2. Writes the output of the test cases in TestOutput--< yyyy-MM-dd>.csv

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