Financial Risk Analytics - Development Assignment

Disclaimer

Problem

Find all palindromes in a string, and print them, along with their starting position and length, sorted by their length.

Example

Input

ABCBAHELLOHOWRACECARAREYOUILOVEUEVOLIIAMAIDOINGGOOD

Result:

ILOVEUEVOLI,26,11

RACECAR,13,7

ABCBA,0,5

IAMAI,37,5

OHO,9,3

ARA,18,3

RAR,19,3

LL,7,2

II,36,2

GG,46,2

OO,48,2

Notes

- A palindrome is a string that reads the same when reversed, e.g., "madam". One-character strings are not palindromes.
- Use whatever language you are most comfortable in to code the assignment.
- Please provide a tested solution with unit tests included.
- Please provide time/space complexity of the solution and guidance on how to run it with an arbitrary string.
- Consider creating a GitHub project to share the code with us, where a root README.md file may be used to document your project as you deem appropriate.