

CS 3304 Data and Information Structures

Lab – Chapter 9

This assignment is adapted from Programming Problems #31 for Chapter 9 in Page 520.

Write a C++ program that uses the queue and stack containers to read string of characters, pushing each character onto a stack as it is read and simultaneously adding it to a queue. When the end of the string is encountered, the program should use the basic stack and queue operations to determine if the string is a palindrome.

Requirements:

1. Input string must be read at keyboard, with proper prompting message.
2. When finishing testing one string, the program must empty the stack and the queue and loop back to read the next string. The looping should be terminated upon reading string “-1”.
3. Use Visual Studio to test your program. Set application type to “General” and project type to “Empty”.
4. Turn in the C++ source files by the due date.