Lab 10

Course: CSE 165
Section: 04L
Due: Thursday, December 2, at 11:59 pm

All the exercises below are selected from the textbook: Thinking in C++ (volume 2).

1. [Exercise 1 on Page 62] Sometimes the input from a file stream contains a two-character sequence to represent a newline. These two characters (0x0a 0x0d) produce extra blank lines when the stream is printed to standard out. Write a program that finds the character 0x0d (ASCII carriage return) and deletes it from the string. [20 pts]

2. [Exercise 2 on Page 260] Create a kind of "hangman" game. Create a class that contains a char and a bool to indicate whether that char has been guessed yet. Randomly select a word from a file, and read it into a vector of your new type. Repeatedly ask the user for a character guess, and after each guess display the characters in the word that have been guessed, and underscores for the characters that haven't. Allow a way for the user to guess the whole word. Decrement a value for each guess, and if the user can get the whole word before the value goes to zero, they win. [45 pts]

3. [Exercise 10 on Page 260] Use a stack<int> and build a Fibonacci sequence on the stack. The program's command line should take the number of Fibonacci elements desired, and you should have a loop that looks at the last two elements on the stack and pushes a new one for every pass through the loop. [35 pts]

Requirements:

* Usage of spaces, blank lines, indention, and comments for readability.

* Descriptive names of variables, functions, structs, classes, and objects (if any).

* Appropriate usage of structs, classes, and objects (if any).

Penalties:

* 10-point deduction per day late until zero.

* Zero if you have possession of a copy of online solutions or work done by someone else.