Homework 4

Complete, to run on our csci2 Unix server, the following Programming Challenge from Gaddis:

I. 6.24
   - After every turn, display (with identifying text) the count of your wins and the count of the computer's wins.
   - At the start, offer the user a choice which of the above two games to play.
   - This Programming Challenge problem will be solved on our csci2 Unix server by a coupled pair of source and executable files.
   - Each function will be documented with a precondition and a postcondition.
   - You will use stubs and drivers to develop this program.
     - Also submit your *preliminary* program source and output where the program calls only stubs. (see Gaddis p. 361)

II. Based on your solution to 6.24, implement (using functions) the Rock Paper Scissors Spock Lizard game. (as popularized on "The Big Bang Theory" TV show)

Each source file will include the following comments:

- Your Name
- "CSCI 201" & the current semester
- Your section number
- "Homework 4"
- The name of the program and the Programming Challenge number it is solving
- The full pathname on our csci2 Unix server for the executable file.
- A brief description of the purpose of the program

For these source files you will:

- Use descriptive identifiers.
- Use both vertical and horizontal white space consistently to enhance readability.
- Import the pseudocode statements into your editor and transform the pseudocode statements into internal comments to describe what your code is doing and why. You shall then write your C++ statements below each comment derived from the pseudocode.
- Use comments describing your variables in a style like that in Program 3-28, lines 15 – 22.

Testing: Validate your program by playing the game for a number rounds for each case. The ratio of wins to losses should be close to 1.0.

Use the UNIX `script` command to generate an output file (.txt) consisting of several runs of your executable. For each source file, submit a PDF file.