## **CS 326 – Project #02**

Purpose: Become familiar with an evidence-based programming language.

Points: 75

## **Assignment:**

Become familiar with the Quorum Programming Language (https://quorumlanguage.com/).

The game Rock-Paper-Scissors<sup>1</sup> is a two-person hand game. The game is often used as a selection method similar to coin flipping or drawing straws to randomly select a winner. However, unlike truly random selections, if the game extends over many sessions, a player can often recognize and exploit the non-random behavior of an opponent.

A popular extension is the Rock-Paper-Scissors-Lizard-Spock<sup>2</sup> game and was featured on the television show Big Bang Theory<sup>3</sup>. This extension adds a significant number of additional possible outcomes and is thus more random.

Write a Quorum program that plays the Rock-Paper-Scissors-Lizard-Spock game. The program should prompt the user for a selection (1-5, 1=rock, 2=paper, 3=scissors, 4=lizard, and 5=spock). The program must ensure that the user selection is between 1-5 and if not, the program should display an error message and terminate.

Choose winner based on the following rules:

Scissors cut paper.
Paper covers rock.
Rock crushes lizard.
Lizard poisons Spock.
Spock smashes scissors.
Scissors decapitate lizard.
Lizard eats paper.
Paper disproves Spock.
Spock vaporizes rock.

Rock crushes scissors.

Rock
Paper
Spock Scissors

Scissors cuts Paper covers Rock crushes Lizard poisons Spock smashes Scissors decapitates Lizard eats Paper disproves Spock vaporizes Rock crushes Scissors.

The program should display the appropriate headers, prompt for and read user input selection (1-5), check for

errors, generate computer selection, display a status message (from above), and show the final result. You must include comments and use meaningful variable names.

## **Submission:**

• Submit a copy of the program source file via the class web page.

## Assignments received after the due date/time will not be accepted.

You may re-submit as many times as desired.

- 1 For more information, refer to: http://en.wikipedia.org/wiki/Rock-paper-scissors
- 2 For more information, refer to: http://www.samkass.com/theories/RPSSL.html
- 3 For more information, refer to: http://www.youtube.com/watch?v=iapcKVn7DdY