CSC 102

Chapter 3 Program Assignment

**The 1899 Liberty Bell Machine**

**AKA- The Slot Machine - AKA- The One-Armed Bandit**

(8 points)

**Problem**: You are planning a trip to Atlantic City this summer; with the anticipation of the trip, you want to create a slot machine app. And since you are a history buff, you would like to recreate the one of the first ones, the Liberty Bell machine (but simplified). 13 points

You will create a three reel machine that will “spin” and state the results of the spin.

The symbols on your machine are:

* The Liberty Bell
* Horseshoes
* Star

The winning combos are:

* 3 bells = 20 points
* 3 horseshoes = 10 points
* 2 horseshoes and 1 star = 5 points

**Procedure**:

1. Assign int values to your symbols
2. “Spin” (generate a random number within your symbols range ) 3 times (no loops, no arrays) (pages 87-88 & 122)
3. Determine (by checking against the winning combos) and print the results to the screen

Sample run:

Welcome! Let's spin the Liberty Bell Machine and see if you are lucky!

Bells are ones, horseshoes are twos, and stars are threes

Reel one is: 2

Reel two is: 3

Reel three is: 3

Sorry, better luck next time!

Thanks for playing the Liberty Bell!

**Texas Pick 3**

(7 points)

**Problem:** You want to play the lottery, but not sure what those odds mean to you. So, you decide to create an app to mock playing the lottery. You are thinking the Pick 3 is the easiest way to win.

How to play Pick 3 – pick 3 numbers from 0-9 for the players numbers, the Quick Pick Numbers. Then those numbers are compared to the Draw Numbers.

**Procedure:** Generate 3 random numbers, value range is 0 – 9, inclusive for the Quick Pick Numbers

Hard code in 3 numbers (programmer’s choice of the 3 numbers – values within range of 0 -9) for the Draw Numbers to match against for wins

Write the statements that will inform the Drawings winnings:

Exact order, win $250.00

Any Order, win $40.00

Otherwise, no winnings

Sample run:

Welcome to Texas Pick 3!

Let's do a quick pick and check to see if you win!

Your quick pick numbers are: 9, 3, 6.

The Draw Number are: 2, 7, 4.

Did you win?

Sorry - not a winner this time, better luck next Draw!

Thanks for playing Texas Pick 3!