**CMSC203 Assignment 2 Design**

Class: CMSC203 CRN 24307

 Program: Assignment #2

Instructor: Dr. Tsai

 Summary of Description: A program that asks a user to guess a randomly generated number between 0 and 100.

 Due Date: 09/19/2021

 Integrity Pledge: I pledge that I have completed the programming assignment independently.

 I have not copied the code from a student or any source.

Aryan Anwar

**Part1: Pseudo Code:** Here is a pseudo code for Assignment 2 program:

1. generate random number between 0 and 100

2. ask user to guess number between 0 and 100

* if user guesses number correctly, inform the user then ask the user if they would like to play again
* if the user enters a number below 0 or above 100, inform user that they need to pick a number between 0 and 100 and keep asking until a valid number is entered

3. if the number entered is above the random number, inform the user and then ask them to enter a number between 0 and the number guessed

* if the user enters a number not between the bounds, inform the user that they need to enter a number between the bounds and keep asking until the user enters a valid number

4. if the number entered is lower then the random number, inform the user then ask them to enter a number between the number they entered and 100

* if the user enters a number not between the bounds, inform the user that they need to enter a number between the bounds and keep asking until the user enters a valid number

5. repeat step 2 and then 3 or 5 depending on the number the user enters until the user correctly guesses.

6. ask the user if they would like to play again, if so restart from step 1, else exit the program