Lab 3

Goals-

Implement a program according to your existing design
Develop a plan to test your program against requirements and verify the results

You will implement the program you designed in Lab 2. You will create the Die and LoadedDie classes. You will use them in the simply dice rolling game. To reiterate:

- Die class- it requires an integer N that is the number of sides and returns a random integer between 1 and N.
- LoadedDie class- it inherits the behavior and elements of Die, but the number it returns is biased such that the average of rolls is higher than for Die
- Game class- it will implement the simple dice-rolling game. The user will specify the number of sides on the dice used by each "player". They do not need to be the same size. The user will indicate if either or both "players" are using loaded dice. The user will also enter the number of rounds in the game. The Game class will create the necessary objects, play the game, and display the results to the user. The output should indicate the size fo die used for each player, if it was the loaded die, and the final score.

You will need to **document the changes** from your original design. If you encounter problems please describe them and how you corrected them.

Test the finished program. Do the results make sense? That is, when both are using the same type of dice are the results close to 50-50? If one is using loaded dice are the results skewed in their favor? If not, what is the problem?

Grading

Programming style- 1 point

Correctly implement and use the Game class - 3 points

Correctly implement and use the Die class - 1 points

Correctly implement and use the LoadedDie class - 1 points

Test using different combinations of Die and LoadedDie for each player- 1 point

Test using different combinations of number of sides for each player- 1 point

Design changes and analysis of results - 2 points

Note: This lab requires a second short pdf document with the analysis and results.
Note: You must include a makefile or your lab will NOT be graded.