Data Structures HW 2 :

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Instructions to run and compile the program:

1. Make sure all the files are in the same folder.
2. The folder should contain DataStructuresHW2.cpp, Player.h, HardModeWheel.h, Wheel.h, Player.cpp, HardModeWheel.cpp, Wheel.cpp files to compile the program as each file has the different class definitions and declarations separately.

Contributions:

Rohan worked on creating the Wheel and HardModeWheel class that was used to spin and generate random numbers for the roulette. All class definitions and declarations were in separate files to increase the readability and reusability of the whole program. HardModeWheel class was inherited from the wheel class and increases the range of random numbers, making it harder for the player to win the game.

Shashwat worked on the Player class. The definition and declarations of the class were in different files to increase readability and reusability of the code. This class keeps track of the money and score of the player.

We then worked on the other parts of the program together such as the playGame function that was created to run the game either in hardmode or normal mode based on the user's input.
This asks the user to enter initial amount, asks the user to bet the money, and wager that money. Rand function acts as the number generator in place of a wheel and the number for the house and player are compared. The one with higher number wins. If there is a tie, the house wins. Based on the player's wager, money is either added or deducted from the initial amount.
The team worked together to find a way to refine the program by debugging and fixing errors.

Each member contributed evenly on this homework. So each member should receive equal portions of the grade (50/50)