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Probability and Applied Statistics

Poker Project Mini Report

This report goes over my project “Poker Program” that implements and solves the Poker Game with a way to implement the Monte Carlo Simulation as well to calculate the percentage when ran in 100,000 trials.

First I created a class called Card to implement and simulate what a card will have; a rank (number) and a face (suite). Each card will have these two properties hence being created in this java class. I set it up so that it can be called and informed the user what kind of rank or what kind of suit a card is specifically in their hand. A to string is implemented so we can see the card in string set up to be able to read.

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Second, I created a class called Deck where it simulates the deck that a card can be drawn from. Just like a real life poker game, this deck will have an ArrayList of deck that has 52 cards on it. A function is situated in this class where a deck is structured and made and can be called to other classes in my program. In this class, we also have the Boolean properties of each solve of the poker game; it comes back in true of false statements that can be analyze using the HandEval class that I created.

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Third, I created a class called HandEval where it calls the functions in my Deck class to evaluate each of the Boolean methods and count the amount to simulate Monte Carlo. The function then prints out the results in terms of percentage to see our results from the simulation.

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Lastly, I created a class called PokerTester where it called the function to do the trials of the HandEval class and we pass in a parameter of trials, which in our case, 100,000 trials. After this is run, we get the simulation printed out.

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