Homework Assignment 6

Submit the link to the GitHub repository where your code is located by 11:59PM, Tuesday, March 6.

Notes: Before starting on this homework assignment, review the answer key to the previous homework assignment to make sure your model is correctly set up. You can choose to continue working on the model you created for the last homework assignment, or on the solution provided here https://github.com/HPM573/HWSolutions.

Problem 1: Confidence Interval (Weight 1): Print the 95% t-based confidence intervals for the expected reward and the probability of loss. You can use 1,000 simulated games to calculate these confidence intervals.

Problem 2: Interpretation of Confidence Intervals (Weight 1): How do you interpret the confidence intervals you reported in Problem 1?

Problem 3: Casino Owner versus Gamblers (Weight 3). Analyze this game from the perspectives of:

1. The casino owner who gets to play this game many times, and
2. A gambler who gets to play this game only 10 times.

Both are interested in knowing their expected reward and the uncertainty in your estimates. Report the appropriate interval (confidence or projection) to describe the uncertainty in your estimates and interpret these intervals for them.