

Ayman Azad  
202056081  
MATH-3030-Mathematical Inquiry  
Project: 1

Project Title: Probability Models for Discrete Randomized Outcome

Research Question:

How are outcomes formally modeled using probability theory?

How to derive expected value and variance using this model

How does the outcome behave in the long run?

Is there any similarity between the Monte Carlo simulation and the outcome?

Study of the regression model to make the outcome more expected

Methodology:

A discrete probability outcome will be constructed and analyzed using the standard results from probability theory. Expected values and variances will be computed explicitly. Monte Carlo simulation comparison with theoretical results. Study and analysis of the convergence behaviour of the model outcome.

Repository Link: [Project 1 Probability-model-for-discrete-randomized-outcome](#)