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Monte Carlo Simulation

Assignment 9

Ques 1:

Using the method to Simulate Jumps at Fixed Dates, simulated the values of the 1000 Asian Put Option in the BSM framework. Simultaneously, 1000 values of European Put Option were also simulated for use as a Control Variate.

The values of $\mu = 0.000298$, $\sigma = 0.022281$, $S(0) = 185.39999$ were obtained from the previous assignment, and the value of Lambda was chosen to be 0.1.

The values obtained as as follows :

Method Used	Average Price	Variance	95% Confidence Interval
Normal Method	18.53713343536167	145.32100684414834	[9.53, 27.544]
Control Variate	18.53713343536167	40.49963492385618	[16.027, 21.047]