

Assume that the stock price $S(t)$ follows the jump-diffusion process. Referring to Lab Assignment Number 07, take the values of $S(0)$, μ and σ , to be ones that you obtained using the daily adjusted closing stock prices of State Bank of India.

Problem Statement: Taking $\lambda = 0.01, 0.05, 0.1$ and 0.2 , and generating the ratio of asset price after and before a jump using the log-normal distribution $LN(\mu, \sigma^2)$, plot the paths of $S(t)$ for 1000 times points for each of the four values of λ as specified.

Your output should have four plots, corresponding to the four specified values of λ .

Submission Deadline: 4th November 2020, 11:59 PM