**Ma323-LAB 08**

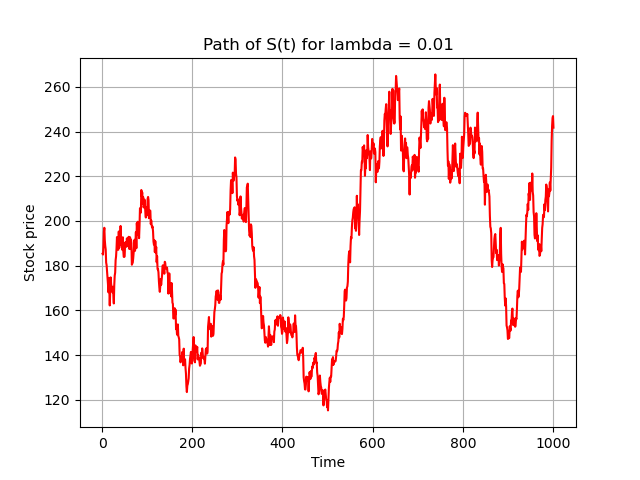
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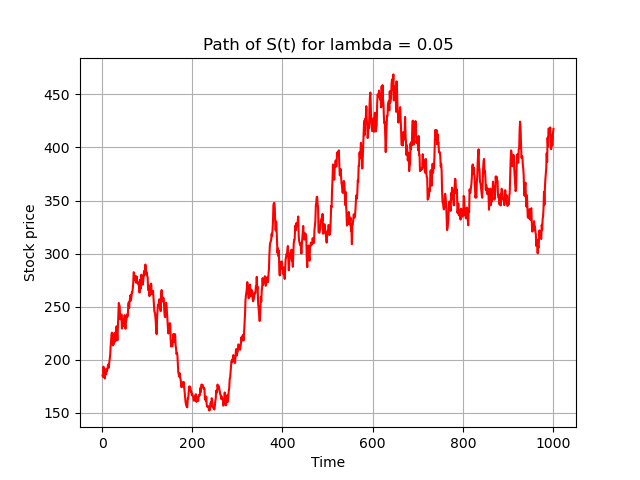
**Submission Date**: 01-11-2020

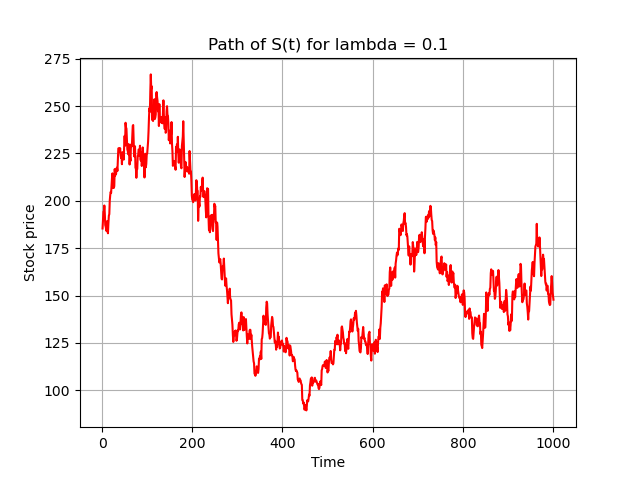
This Lab assignment was done by using the values of = 0.0002981060700200021 and

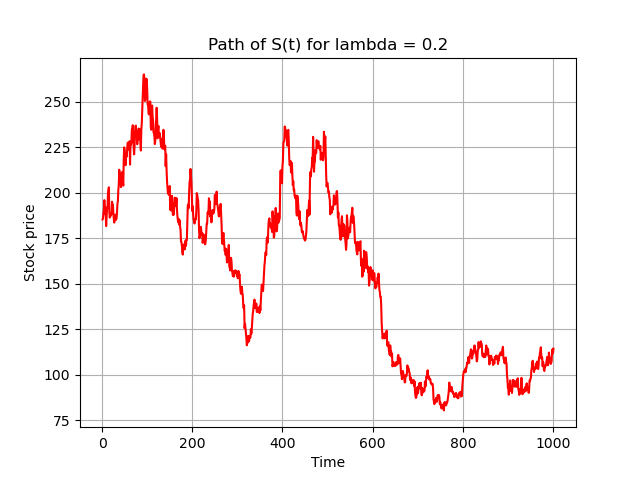
and S(0)=185.399994 as calculated in Lab 7. For simulating the jump diffusion model with given condition that the ratio of asset price after and before a jump should follow the log-normal distribution LN( ,), I have used the first approach i.e. **Simulating the dates** to generate the path of stock prices S(t).

The path of stock prices S(t) for N ~ Poisson () for given values as [0.01, 0.05, 0.1, 0.2] are shown below:









**Note**: These outputs can vary with time as they are subject to randomness generated by Normal and Poisson processes used in simulating the model.

Reference for data: https://finance.yahoo.com/quote/SBIN.NS/history/