Asset Price Simulation

This program is to generate a line chart for the asset price model:

$$S(t) = S(0) * e^{((mu - sigma^2 / 2)*t + sigma * W(t))}$$

where S(0) is the initial value, mu is the draft, sigma is the volatility, t is the time, W is Werner Process.

Let T be the time length , delta_t be the time difference, M = T/delta_t be the number of equidistant points.

Setup: S(0) = 10, mu = 0.1, sigma = 0.2, T = 2, delta_t = 0.01, M = 200

Note: normal distributed values are generated by rejection samplings.

Result: