

Pseudo code

Euler approximation (initial, T , N , σ , r , type, strike)

$$\Delta = \frac{T}{N}; \text{ initial} = 100$$

loop for $i = 0 \dots N$

$$Z \leftarrow N(0, 1)$$

$$S_{t+1} \leftarrow S_t + \mu(S_t) \cdot \Delta + \sigma(S_t) \sqrt{\Delta} \cdot Z$$

$$P = (0, S_{T-N} - K)^+$$