

7. Algorithm:

1. Create final spot values of the form

$$S_0 e^{(r-d-\frac{1}{2}\sigma^2)T + \sigma\sqrt{T}j}, j \in \{-N, \dots, N\}$$

2. For each spot value evaluate the payoff and store it

3. At previous time compute possible spot vals of form

$$S_0 e^{(r-d-\frac{1}{2}\sigma^2)(N-1)\frac{T}{N} + \sigma\sqrt{\frac{T}{N}}j}, j \in \{-(N-1), \dots, N-1\}$$

4. For each of these spot, compute the payoff and take max with the discounted pay-off of the two possible values of next time.

5. Repeat 3 and 4 until reaching 0

