

Command Window

A PROGRAM TO CALCULATE THE EUROPEAN OPTION PRICE USING THE BLACK SCHOLES FORMULA

Please provide the following inputs.

Enter the current stock price:
100
Enter the strike price:
80
Enter the volatility of the asset:
0.01
Enter the risk-free interest rate:
0.05
Enter the maturity time (in years):
5

Command Window

Enter '1' if there's any dividend else enter '0'.
1
Enter '1' if the paid dividend is continuous else enter '0'.
0
Enter the number of dividends paid.
2
Enter the amount of 1th dividend.
10
Enter the payment time (in years) of 1th dividend.
1
Enter the amount of 2th dividend.
20
Enter the payment time (in years) of 2th dividend.
2
Enter '1' for the calculation of the call option price else
'0' for the calculation of the put option price.
1
Call option price = 10.086895

CALL OPTION PRICE PLOT

Enter initial stock price:
100
Enter final stock price:
110
Enter initial time:
0
Enter final time:
5