

# Ma374-LAB 08

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**Submission Date:** 11-03-2021

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## QUESTION 1:

### For BSE Stocks:

Stock	Volatility (1 month)
ASTRAL.BO	0.186983529
JINDALSTEL.BO	0.444671014
JUBLINDS.BO	0.509689284
VOLTAS.BO	0.283011582
JUBLINDS.BO	0.509689284
HAVELLS.BO	0.273836255
RELIANCE.BO	0.240108306
BOMDYEING.BO	0.544111782
BERGEPAINT.BO	0.287182518
MANAPPURAM.BO	0.395421725

### For NSE Stocks:

Stock	Volatility (1 month)
HDFCBANK.NS	0.174367493
TATAMOTORS.NS	0.367058691
ADANIENT.NS	0.496936295
VOLTAS.NS	0.288381857
BAJAJFINSV.NS	0.355919458
HAVELLS.NS	0.281617087
RELIANCE.NS	0.235293786
BERGEPAINT.NS	0.284290536
ASIANPAINT.NS	0.305993984
MUTHOOTFIN.NS	0.537644914

### For Sensex:

Index	Volatility (1 month)
SENSEX	0.155322577

### For Nifty:

Index	Volatility (1 month)
NIFTY	0.153572236

## QUESTION 2:

Stock: ASTRAL.BO [BSE]

For A=1.0, Call Price = 56.14583689816118  
 For A=0.5, Call Price = 440.32266516951506  
 For A=0.1, Call Price = 775.6053532772266  
 For A=1.5, Call Price = 0.0802582581681186

Put Price = 34.92653272589473  
 Put Price = 3.833818595921912e-07  
 Put Price = 0.0  
 Put Price = 397.96431469976847

Stock: JINDALSTEL.BO [BSE]

For A=1.0, Call Price = 22.07087692992627  
 For A=0.5, Call Price = 83.21199838813968  
 For A=0.1, Call Price = 146.33534427139978  
 For A=1.5, Call Price = 3.3610672337681216

Put Price = 18.06737931592994  
 Put Price = 0.13525263114151187  
 Put Price = 1.4210854715202004e-13  
 Put Price = 78.43081776277361

Stock: JUBLINDS.BO [BSE]

For A=1.0, Call Price = 15.392191637936754  
 For A=0.5, Call Price = 51.44970293535187  
 For A=0.1, Call Price = 90.24690087980363  
 For A=1.5, Call Price = 3.2289417910948757

Put Price = 12.923182840770018  
 Put Price = 0.2151985367685043  
 Put Price = 8.695622000232106e-11  
 Put Price = 49.52542859534477

Stock: VOLTAS.BO [BSE]

For A=1.0, Call Price = 49.35596825854145  
 For A=0.5, Call Price = 275.8376132507647  
 For A=0.1, Call Price = 485.86812968863524  
 For A=1.5, Call Price = 1.4305289026368264

Put Price = 36.063404472189745  
 Put Price = 0.0030684075888416373  
 Put Price = 0.0  
 Put Price = 250.6799461731093

Stock: JUBLINDS.BO [BSE]

For A=1.0, Call Price = 15.392191637936754 Put Price = 12.923182840770018  
For A=0.5, Call Price = 51.44970293535187 Put Price = 0.2151985367685043  
For A=0.1, Call Price = 90.24690087980363 Put Price = 8.695622000232106e-11  
For A=1.5, Call Price = 3.2289417910948757 Put Price = 49.52542859534477

Stock: HAVELLS.BO [BSE]

For A=1.0, Call Price = 59.55135873930334 Put Price = 43.05901742045177  
For A=0.5, Call Price = 342.23550892581846 Put Price = 0.002247216392675  
For A=0.1, Call Price = 602.8259980218852 Put Price = 0.0  
For A=1.5, Call Price = 1.4532385209561127 Put Price = 310.7018175926788

Stock: RELIANCE.BO [BSE]

For A=1.0, Call Price = 86.82396877523422 Put Price = 59.98864006788733  
For A=0.5, Call Price = 556.8613472848032 Put Price = 0.0003234311296864689  
For A=0.1, Call Price = 980.8815799707347 Put Price = 0.0  
For A=1.5, Call Price = 0.9674526031348964 Put Price = 504.1578190421146

Stock: BOMDYEING.BO [BSE]

For A=1.0, Call Price = 17.565568220933123 Put Price = 14.91016218237234  
For A=0.5, Call Price = 55.44577116338041 Put Price = 0.3433298441000119  
For A=0.1, Call Price = 97.06006954530537 Put Price = 1.4492798072751611e-09  
For A=1.5, Call Price = 4.209458638088904 Put Price = 54.00108788024774

Stock: BERGEPAINT.BO [BSE]

For A=1.0, Call Price = 29.981684050809037 Put Price = 22.006806733640616  
For A=0.5, Call Price = 165.48931627499462 Put Price = 0.0023048664104123873  
For A=0.1, Call Price = 291.49671868171686 Put Price = 0.0  
For A=1.5, Call Price = 0.935301895946111 Put Price = 150.47255867019356

Stock: MANAPPURAM.BO [BSE]

For A=1.0, Call Price = 10.784667594629639 Put Price = 8.612636635305265  
For A=0.5, Call Price = 45.099470474750206 Put Price = 0.027565560088021357  
For A=0.1, Call Price = 79.39180407893244 Put Price = 0.0  
For A=1.5, Call Price = 1.1806760568737023 Put Price = 41.90851905288715

Stock: HDFCBANK.NS [NSE]

For A=1.0, Call Price = 65.1239329983639 Put Price = 39.14309171907621  
For A=0.5, Call Price = 539.1295196818003 Put Price = 4.215644366922788e-08  
For A=0.1, Call Price = 949.6484623279288 Put Price = 0.0  
For A=1.5, Call Price = 0.044078209254978296 Put Price = 487.2119152903234

Stock: TATAMOTORS.NS [NSE]

For A=1.0, Call Price = 19.61860386110378 Put Price = 15.399067977355358  
For A=0.5, Call Price = 87.58591047873253 Put Price = 0.026145586858319803  
For A=0.1, Call Price = 154.23194809837483 Put Price = 0.0  
For A=1.5, Call Price = 1.688570035998513 Put Price = 80.80926316037588

Stock: ADANIENT.NS [NSE]

For A=1.0, Call Price = 24.008181881699983 Put Price = 20.06780832678794  
For A=0.5, Call Price = 82.05876590276708 Put Price = 0.29191012531106253  
For A=0.1, Call Price = 144.02804155553486 Put Price = 4.3655745685100555e-11  
For A=1.5, Call Price = 4.76718846533176 Put Price = 78.65329713296366

Stock: VOLTAS.NS [NSE]

For A=1.0, Call Price = 49.84687600557697	Put Price = 36.634979968458424
For A=0.5, Call Price = 274.164671864219	Put Price = 0.004066845659679075
For A=0.1, Call Price = 482.9195722037119	Put Price = 0.0
For A=1.5, Call Price = 1.587442649485407	Put Price = 249.3242555938076

Stock: BAJAJFINSV.NS [NSE]

For A=1.0, Call Price = 718.8126312933778	Put Price = 559.97296488658
For A=0.5, Call Price = 3296.8018517761634	Put Price = 0.7133175727644812
For A=0.1, Call Price = 5805.88762844068	Put Price = 0.0
For A=1.5, Call Price = 55.55420683739999	Put Price = 3033.9634082272014

Stock: HAVELLS.NS [NSE]

For A=1.0, Call Price = 60.86844911872345	Put Price = 44.40646859120545
For A=0.5, Call Price = 341.606761545609	Put Price = 0.0035178818500298803
For A=0.1, Call Price = 601.7162541727517	Put Price = 0.0
For A=1.5, Call Price = 1.7202770096388456	Put Price = 310.3995596183619

Stock: RELIANCE.NS [NSE]

For A=1.0, Call Price = 84.68884959119316	Put Price = 58.07301914845641
For A=0.5, Call Price = 552.3064158314845	Put Price = 0.00020961011614417657
For A=0.1, Call Price = 972.8585068442736	Put Price = 0.0
For A=1.5, Call Price = 0.8233646945310227	Put Price = 499.89791003042603

Stock: BERGEPAINT.NS [NSE]

For A=1.0, Call Price = 29.747579351608977	Put Price = 21.766576981610797
For A=0.5, Call Price = 165.61608825466902	Put Price = 0.0019756196699347583
For A=0.1, Call Price = 291.7206008469998	Put Price = 0.0
For A=1.5, Call Price = 0.88212575448377	Put Price = 150.53423364948654

Stock: ASIANPAINT.NS [NSE]

For A=1.0, Call Price = 131.76022547240882	Put Price = 98.5638566670084
For A=0.5, Call Price = 688.8831531757955	Put Price = 0.023921273095311335
For A=0.1, Call Price = 1213.38952238054	Put Price = 0.0
For A=1.5, Call Price = 5.549105430347282	Put Price = 628.0155997222464

Stock: MUTHOOTFIN.NS [NSE]

For A=1.0, Call Price = 77.20278081766261	Put Price = 65.40443827998976
For A=0.5, Call Price = 246.25082123792617	Put Price = 1.4229237690897492
For A=0.1, Call Price = 431.2515414177651	Put Price = 3.997797648480628e-09
For A=1.5, Call Price = 18.07201411117535	Put Price = 239.30322650466604

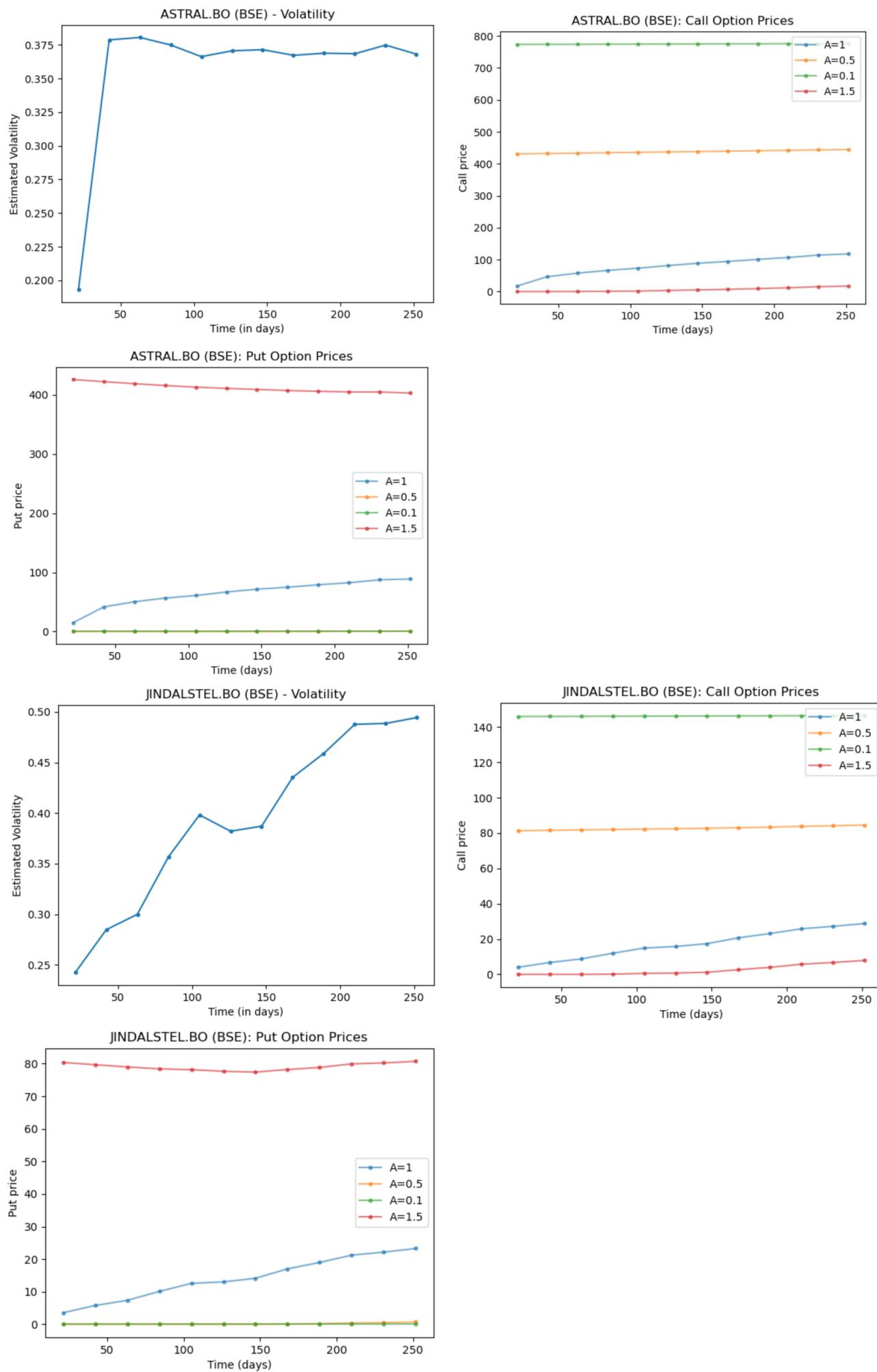
SENSEX [BSE]

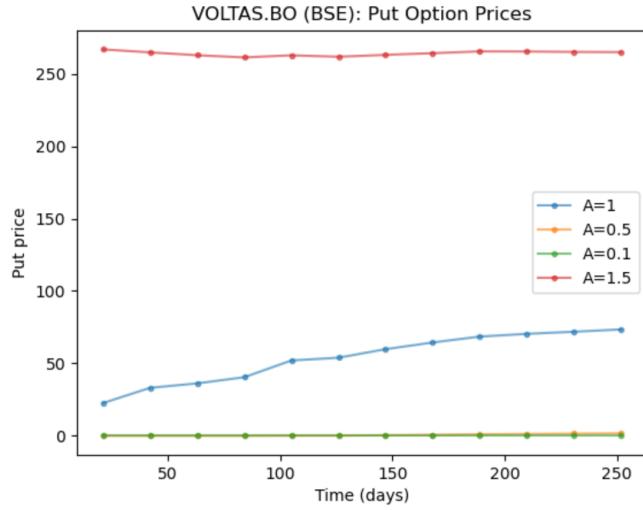
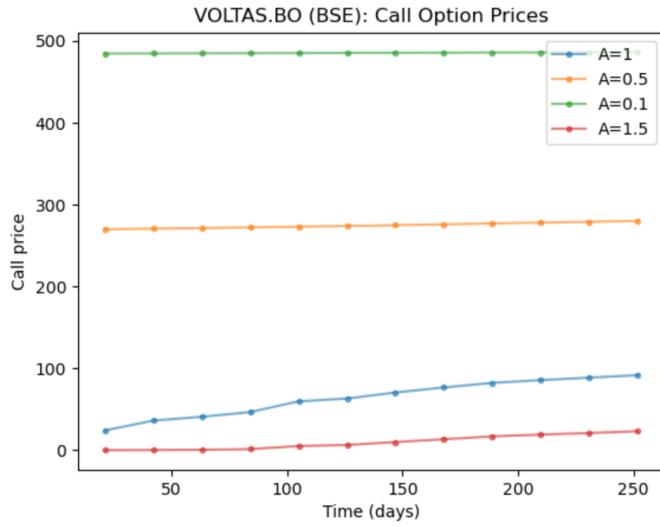
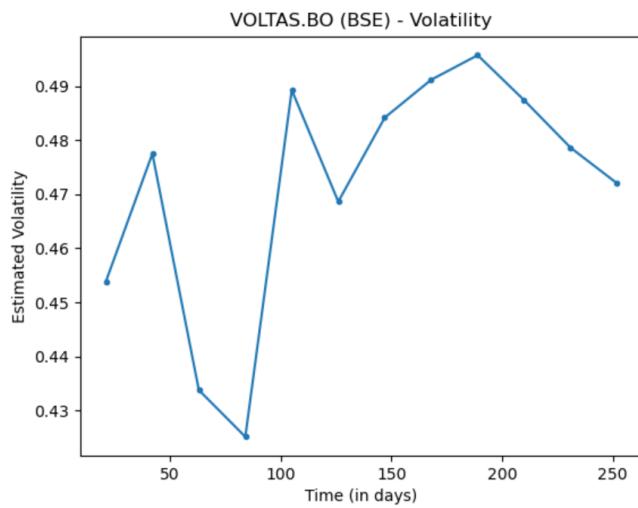
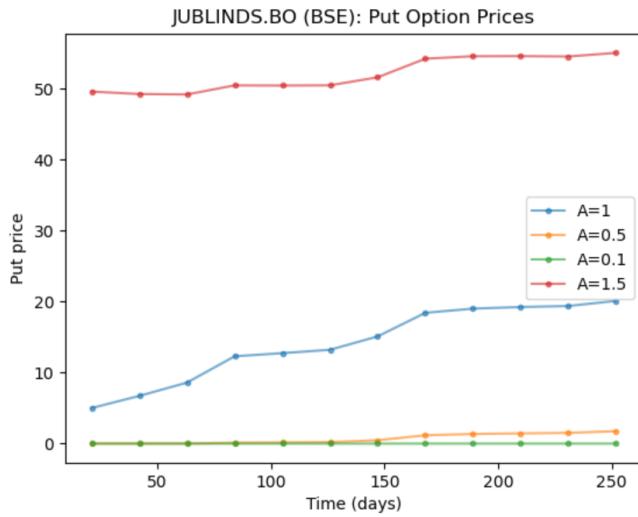
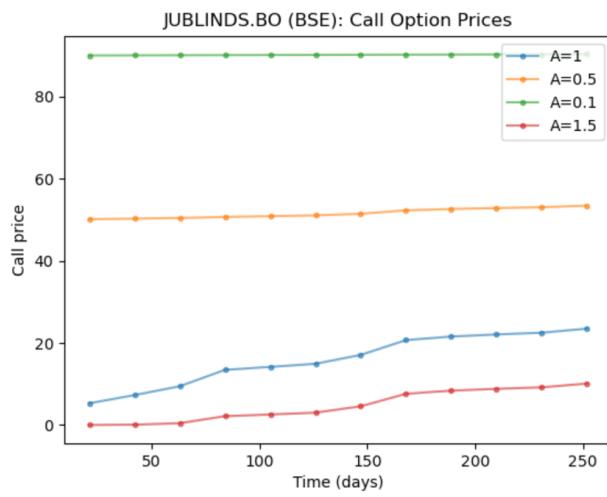
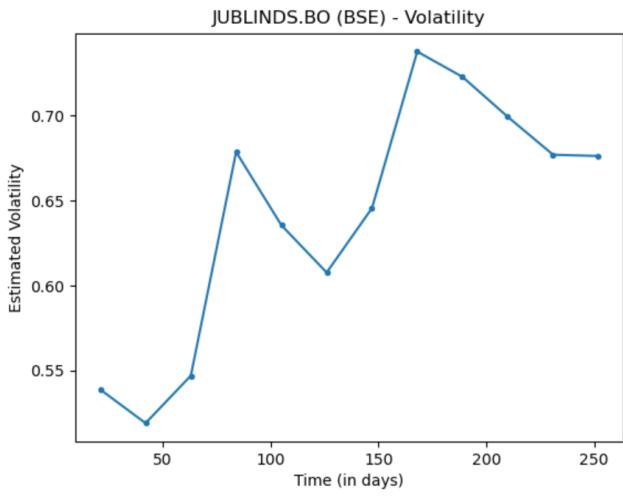
For A=1.0, Call Price = 2021.8016006024845	Put Price = 1141.6014110047981
For A=0.5, Call Price = 18265.070799811252	Put Price = 1.2409145710989833e-08
For A=0.1, Call Price = 32172.967287959767	Put Price = 0.0
For A=1.5, Call Price = 0.3188077310589641	Put Price = 16504.98922833453

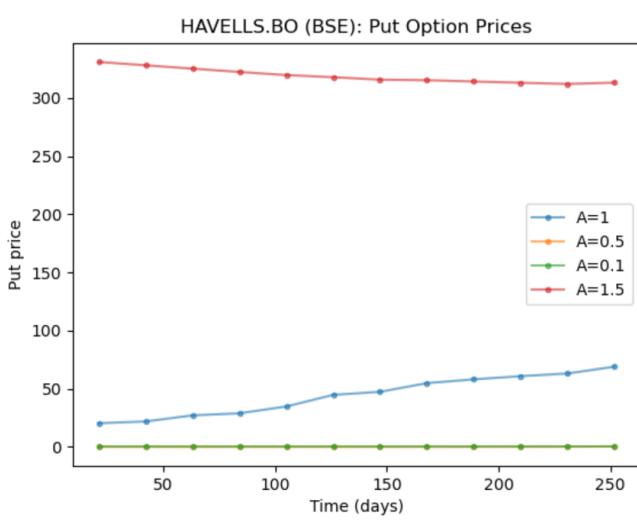
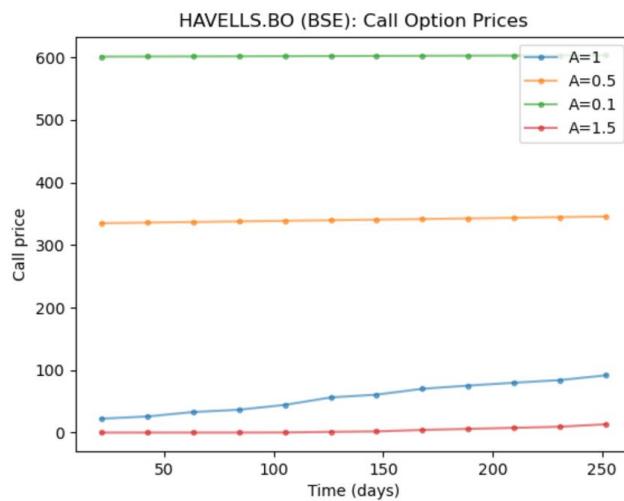
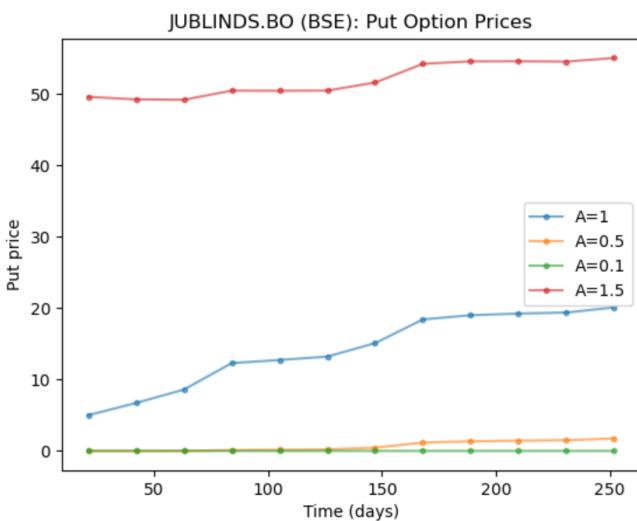
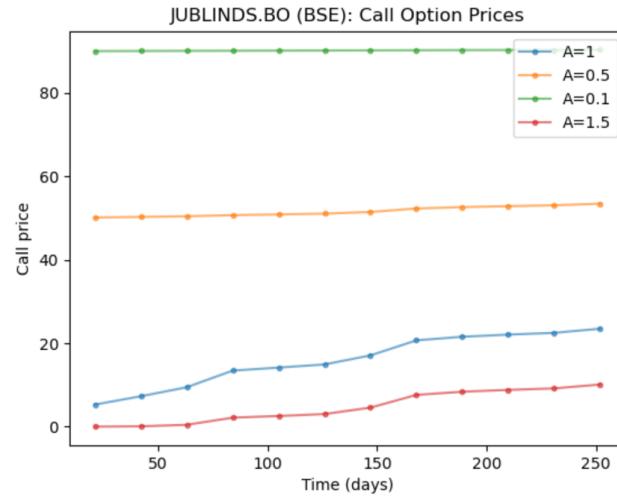
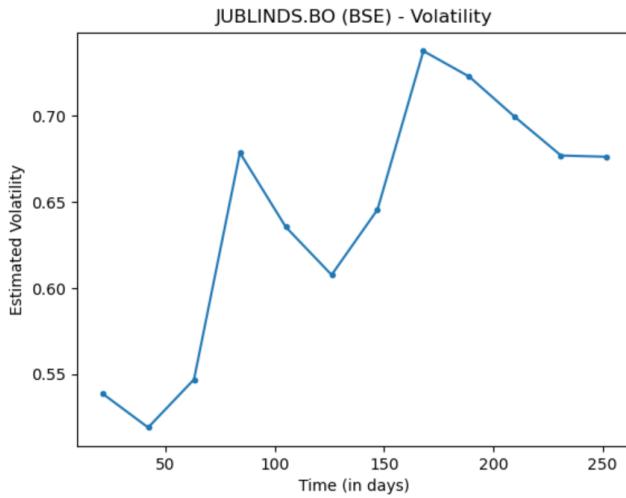
NIFTY [NSE]

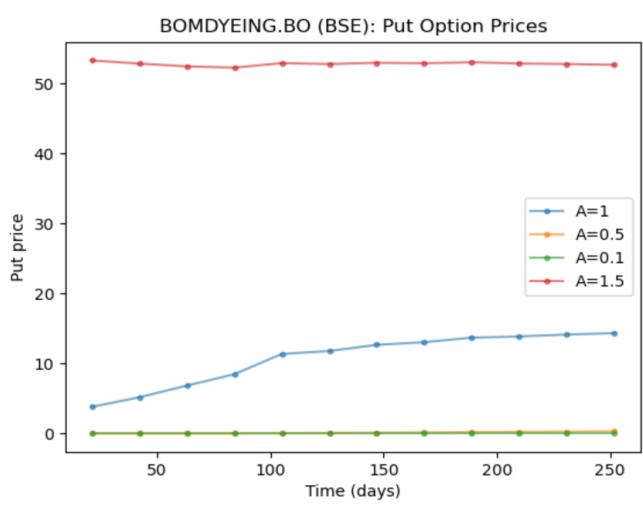
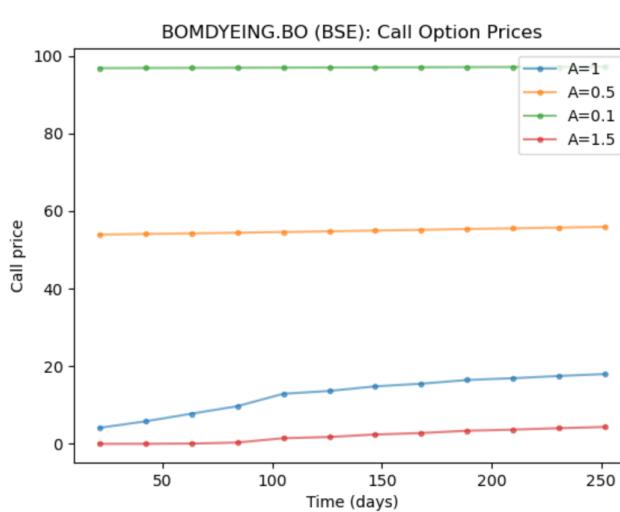
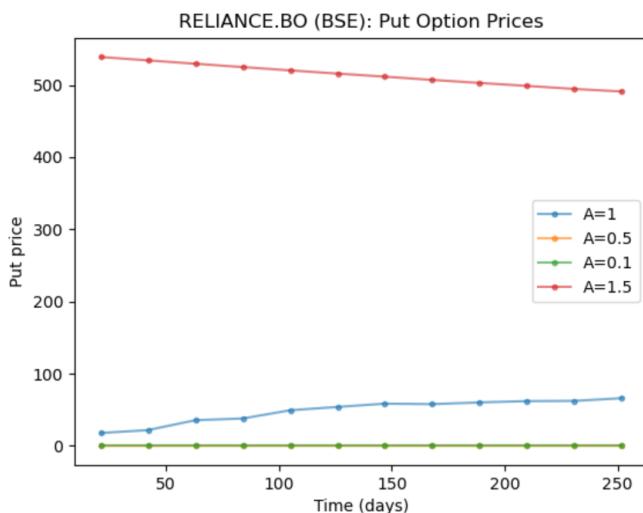
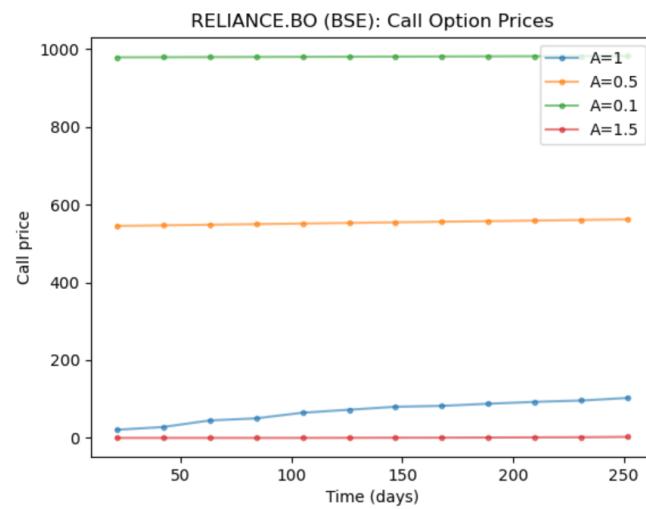
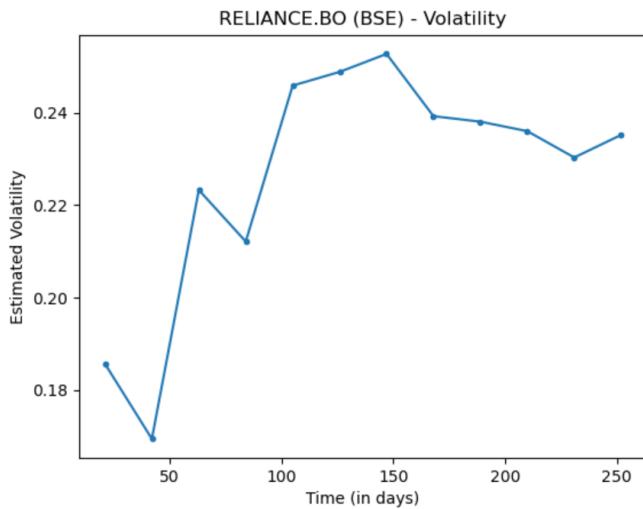
For A=1.0, Call Price = 606.2377284097875	Put Price = 340.08352303082575
For A=0.5, Call Price = 5522.977002691706	Put Price = 2.2246240405365825e-09
For A=0.1, Call Price = 9728.435240537896	Put Price = 0.0
For A=1.5, Call Price = 0.0815100242186495	Put Price = 4990.750101955776

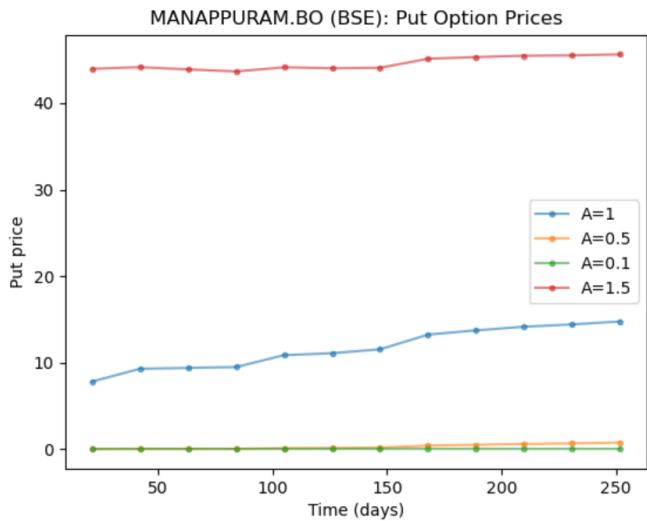
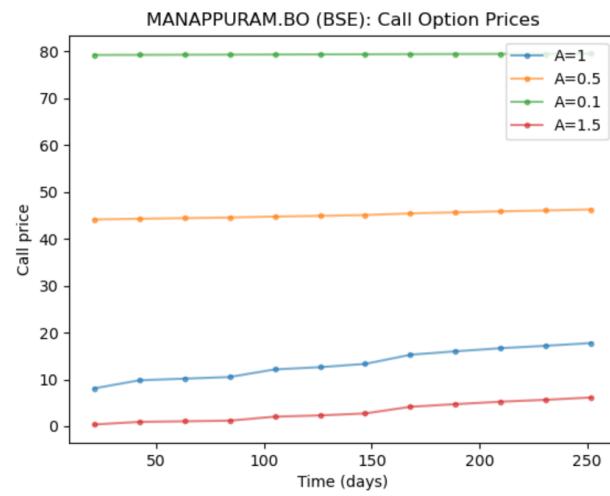
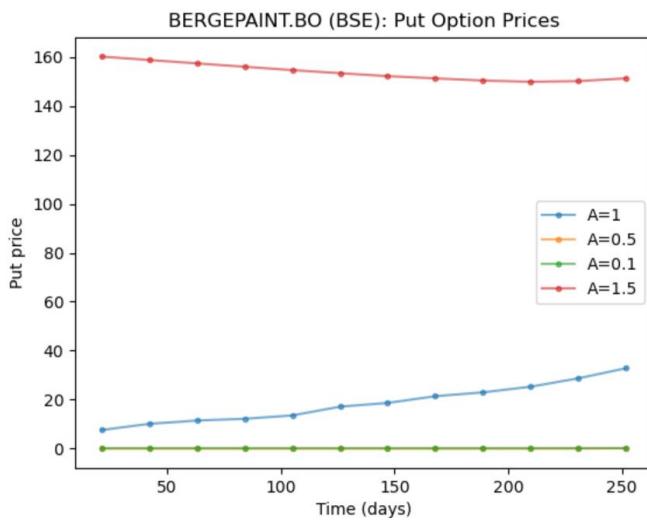
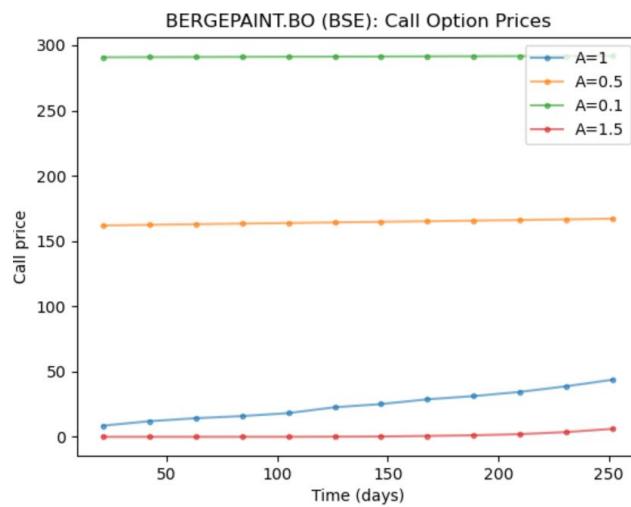
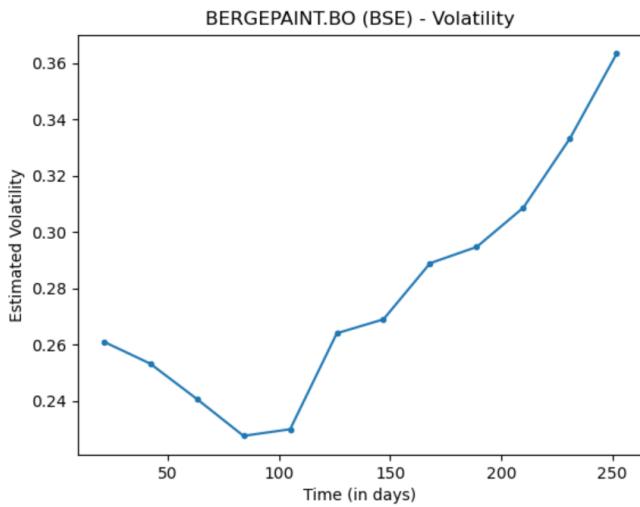
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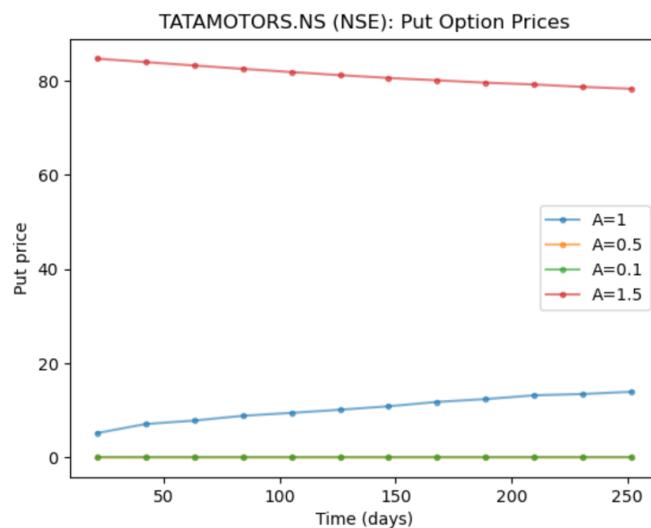
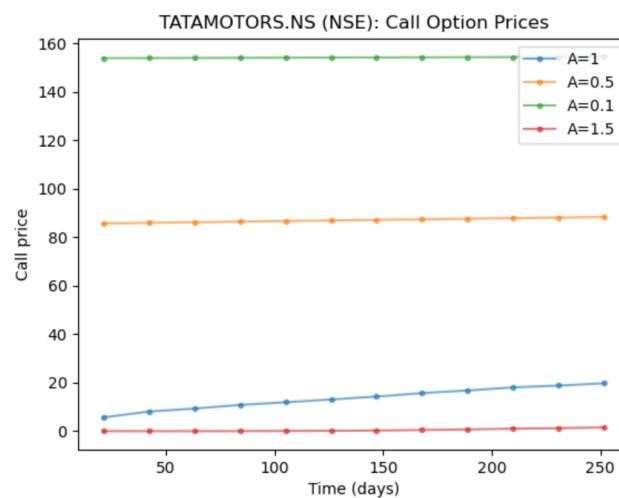
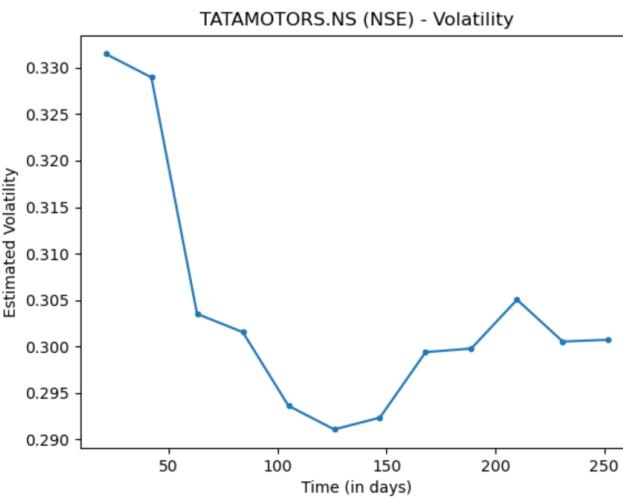
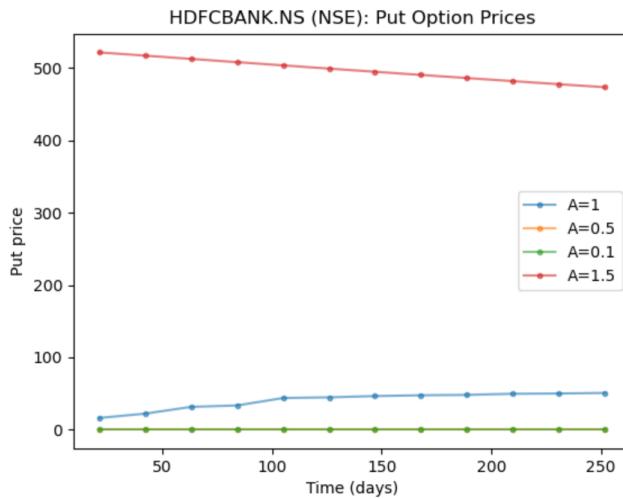
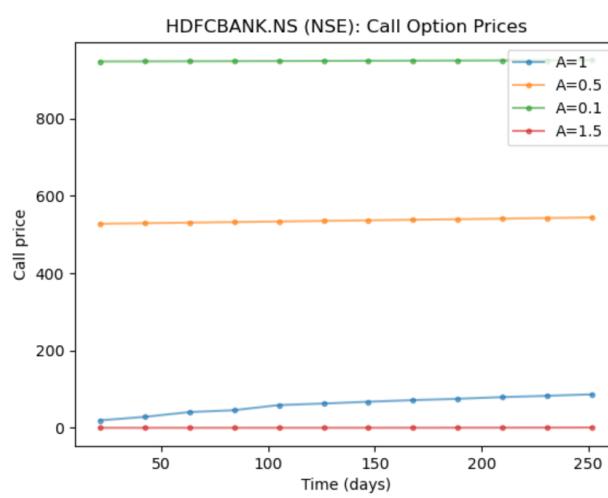
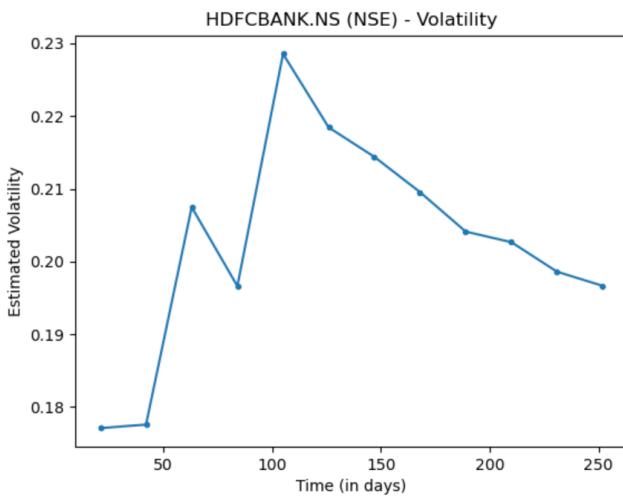




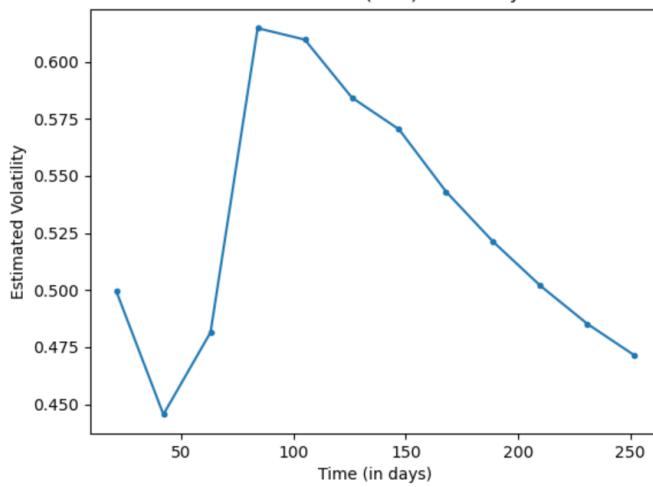




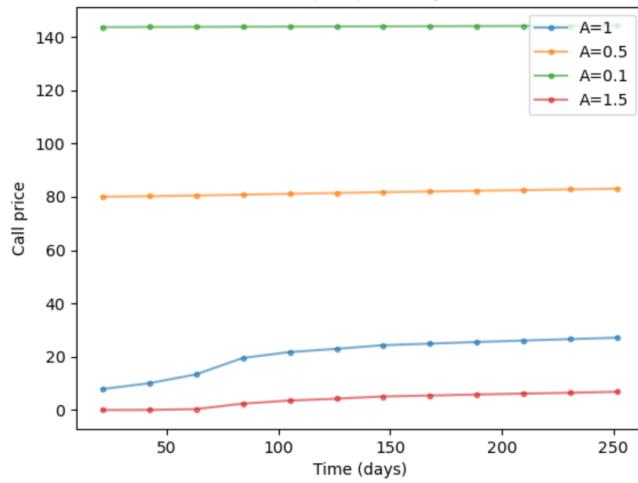




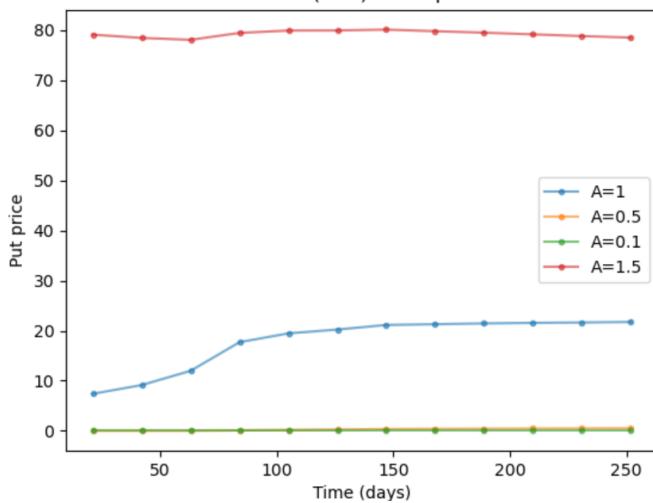
ADANIENT.NS (NSE) - Volatility



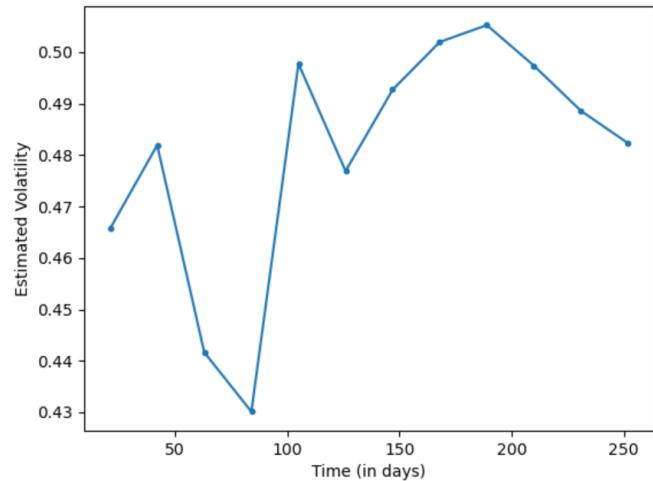
ADANIENT.NS (NSE): Call Option Prices



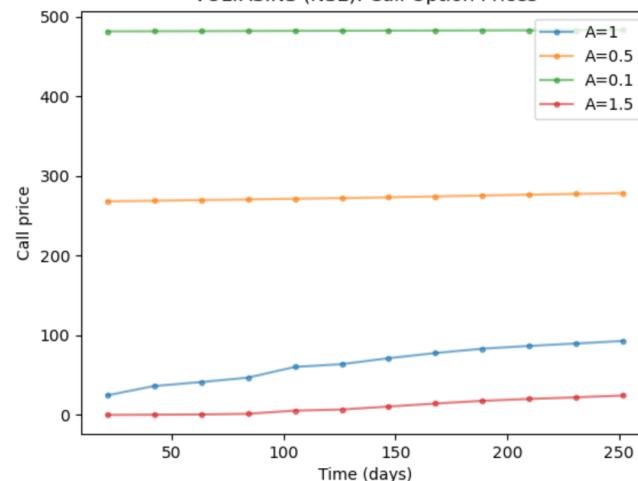
ADANIENT.NS (NSE): Put Option Prices



VOLTAS.NS (NSE) - Volatility



VOLTAS.NS (NSE): Call Option Prices



VOLTAS.NS (NSE): Put Option Prices

