

Financial Engineering Lab (MA374)

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Lab - 08

To run the code type **python3 180123021_Kartikeya_Singh_q.py** into the terminal.

Question 1

The historical volatility of the stocks (Assuming 20 days in a month) is given by -

- Historical Volatility for Axis Bank (BSE) = 0.235892
- Historical Volatility for Bajaj Auto (BSE) = 0.246295
- Historical Volatility for HDFC (BSE) = 0.151564
- Historical Volatility for HUL (BSE) = 0.241268
- Historical Volatility for Infosys (BSE) = 0.264697
- Historical Volatility for Reliance (BSE) = 0.238916
- Historical Volatility for SBI (BSE) = 0.212594
- Historical Volatility for Tata Steel (BSE) = 0.250462
- Historical Volatility for Sun Pharma (BSE) = 0.497560
- Historical Volatility for Asian Paints (BSE) = 0.306401
- Historical Volatility for COAL INDIA (NSE) = 0.219837
- Historical Volatility for GAIL (NSE) = 0.283191
- Historical Volatility for IOC (NSE) = 0.314579
- Historical Volatility for ICICI (NSE) = 0.200622
- Historical Volatility for ITC (NSE) = 0.182183
- Historical Volatility for NTPC (NSE) = 0.246324
- Historical Volatility for WIPRO (NSE) = 0.255088
- Historical Volatility for ADANI PORTS (NSE) = 0.370855
- Historical Volatility for CIPLA (NSE) = 0.212166
- Historical Volatility for JSW STEEL (NSE) = 0.308388

Question 2

The BSM price of European Call and Put Options **at $t=0$** are calculated assuming sigma to be equal to the historical volatility from last one month's data and **$K = S_0$** .

❖ **Axis Bank (BSE)** ($K = S_0$)

- Call Price = 49.162040
- Put Price = 33.743708

❖ **Bajaj Auto (BSE)** ($K = S_0$)

- Call Price = 207.990340
- Put Price = 145.044088

❖ **HDFC (BSE)** ($K = S_0$)

- Call Price = 58.621513
- Put Price = 32.633866

❖ **HUL (BSE)** ($K = S_0$)

- Call Price = 141.674105
- Put Price = 98.059677

❖ **Infosys (BSE)** ($K = S_0$)

- Call Price = 53.298158
- Put Price = 38.109504

❖ **Reliance (BSE)** ($K = S_0$)

- Call Price = 88.742186
- Put Price = 61.201080

❖ **SBI (BSE)** (K = S0)

- Call Price = 21.299199
- Put Price = 14.029203

❖ **Tata Steel (BSE)** (K = S0)

- Call Price = 40.368345
- Put Price = 28.320317

❖ **Sun Pharma (BSE)** (K = S0)

- Call Price = 62.412677
- Put Price = 52.180729

❖ **Asian Paints (BSE)** (K = S0)

- Call Price = 132.139138
- Put Price = 98.885329

❖ **COAL INDIA (NSE)** (K = S0)

- Call Price = 15.168242
- Put Price = 10.129194

❖ **GAIL (NSE)** (K = S0)

- Call Price = 14.798564
- Put Price = 10.815151

❖ **IOC (NSE)** (K = S0)

- Call Price = 12.055159
- Put Price = 9.089403

❖ **ICICI (NSE)** (K = S0)

- Call Price = 24.791363
- Put Price = 15.927715

❖ **ITC (NSE)** (K = S0)

- Call Price = 16.472259
- Put Price = 10.119444

❖ **NTPC (NSE)** (K = S0)

- Call Price = 8.828269
- Put Price = 6.156741

❖ **WIPRO (NSE)** (K = S0)

- Call Price = 20.604469
- Put Price = 14.548075

❖ **ADANI PORTS (NSE)** (K = S0)

- Call Price = 44.362445
- Put Price = 34.907033

❖ **CIPLA (NSE)** (K = S0)

- Call Price = 37.383335
- Put Price = 24.602660

❖ **JSW STEEL (NSE)** (K = S0)

- Call Price = 27.914834
- Put Price = 20.928770

Now, the value of K is varied as $K = A \times S_0$ ($A = 0.5 : 0.1 : 1.5$), The Call and Put Prices for these values are calculated and is given below -

ADANI PORTS

| K | Call Price | Put Price |
|-------------|------------------|------------------|
| 191.630249 | 228.492594613498 | 32.1309779076556 |
| 229.9562988 | 207.39497656407 | 48.413136117059 |
| 268.2823486 | 188.866170406045 | 67.2641062178659 |
| 306.6083984 | 172.537054976198 | 88.3147670468499 |
| 344.9344482 | 158.091495985259 | 111.248984314743 |
| 383.260498 | 145.262576349262 | 135.799840937577 |
| 421.5865478 | 133.826031161925 | 161.743072009072 |
| 459.9125976 | 123.593483708811 | 188.890300814788 |
| 498.2386474 | 114.406371094441 | 217.08296445925 |
| 536.5646972 | 106.130782200544 | 246.187151824185 |
| 574.890747 | 98.6531798403278 | 276.0893257228 |

Asian Paints

| K | Call Price | Put Price |
|--------------|------------------|------------------|
| 677.5427245 | 734.935551593791 | 40.6642376213233 |
| 813.0512694 | 637.690767913639 | 75.5822809466774 |
| 948.5598143 | 552.311959286792 | 122.366299325337 |
| 1084.0683592 | 478.083828709818 | 180.300995753869 |
| 1219.5769041 | 413.949171762639 | 248.329165812196 |
| 1355.085449 | 358.739023701295 | 325.281844756359 |
| 1490.5939939 | 311.302631743034 | 410.008279803604 |
| 1626.1025388 | 270.573371207088 | 501.441846273164 |
| 1761.6110837 | 235.596583840647 | 598.62788591223 |
| 1897.1196286 | 205.536049395888 | 700.730178472977 |
| 2032.6281735 | 179.669241449621 | 807.026197532216 |

Axis Bank

| K | Call Price | Put Price |
|------------|------------------|------------------|
| 309.515625 | 340.398354932103 | 23.2407619222477 |
| 371.41875 | 297.870566021536 | 41.0877044097092 |
| 433.321875 | 260.578334161052 | 64.1702039472543 |
| 495.225 | 228.092191275067 | 92.0587924592984 |
| 557.128125 | 199.895909233802 | 124.237241816062 |
| 619.03125 | 175.464281570633 | 160.180345550921 |
| 680.934375 | 154.302533639214 | 199.393329017532 |
| 742.8375 | 135.963595147577 | 241.429121923923 |
| 804.740625 | 120.053247232043 | 285.893505406419 |
| 866.64375 | 106.228994962981 | 332.443984535385 |
| 928.546875 | 94.1959737793079 | 380.785694749741 |

Bajaj Auto

| K | Call Price | Put Price |
|--------------|------------------|------------------|
| 1272.4802245 | 1354.60902019758 | 50.7111470124637 |
| 1526.9762694 | 1159.5458990207 | 103.860540998561 |
| 1781.4723143 | 987.626383284931 | 180.153540425774 |
| 2035.9683592 | 838.499676903552 | 279.239349207372 |
| 2290.4644041 | 710.593448450759 | 399.545635917558 |
| 2544.960449 | 601.735358770801 | 538.900061400576 |
| 2799.4564939 | 509.564807417975 | 694.942025210728 |
| 3053.9525388 | 431.77586274711 | 865.365595702841 |
| 3308.4485837 | 366.244309389531 | 1048.04655750824 |
| 3562.9446286 | 311.082022037851 | 1241.09678531954 |
| 3817.4406735 | 264.648888237787 | 1442.87616668245 |

CIPLA

| K | Call Price | Put Price |
|-------------|------------------|------------------|
| 257.5823975 | 295.625760253189 | 31.6836306989615 |
| 309.098877 | 264.277133220171 | 50.5795367550969 |
| 360.6153565 | 236.794073195929 | 73.3410098200099 |
| 412.131836 | 212.70167864662 | 99.4931483598549 |
| 463.6483155 | 191.554588459758 | 128.590591262148 |
| 515.164795 | 172.95487939615 | 160.235415287694 |
| 566.6812745 | 156.555564884972 | 194.080633865671 |
| 618.197754 | 142.057862869866 | 229.827464939719 |
| 669.7142335 | 129.206104556215 | 267.220239715223 |
| 721.230713 | 117.782085115563 | 306.040753363725 |
| 772.7471925 | 107.599655357638 | 346.102856694954 |

COAL INDIA

| K | Call Price | Put Price |
|-------------|------------------|------------------|
| 98.4551315 | 111.886721077014 | 11.0007237190169 |
| 118.1461578 | 99.5783498678105 | 17.897205638214 |
| 137.8371841 | 88.7903244786522 | 26.3140333774562 |
| 157.5282104 | 79.3468124016035 | 36.0753744288082 |
| 177.2192367 | 71.0769274240402 | 47.0103425796455 |
| 196.910263 | 63.824760763733 | 58.9630290477388 |
| 216.6012893 | 57.4525577178635 | 71.7956791302698 |
| 236.2923156 | 51.8406837655345 | 85.3886583063415 |
| 255.9833419 | 46.886202432704 | 99.6390301019115 |
| 275.6743682 | 42.5009620205305 | 114.458642818139 |
| 295.3653945 | 38.6096198727154 | 129.772153798724 |

GAIL

| K | Call Price | Put Price |
|-------------|------------------|------------------|
| 81.573883 | 90.1493892520954 | 6.56143990463488 |
| 97.8886596 | 79.1042271255841 | 11.4282411086315 |
| 114.2034362 | 69.4211966587746 | 17.6571739723299 |
| 130.5182128 | 60.9800226546662 | 25.1279632987294 |
| 146.8329894 | 53.6427804057856 | 33.7026843803567 |
| 163.147766 | 47.2721912222575 | 43.2440585273365 |
| 179.4625426 | 41.7405112356663 | 53.6243418712532 |
| 195.7773192 | 36.933160428672 | 64.7289543947668 |
| 212.0920958 | 32.7495509535469 | 76.4573082501495 |
| 228.4068724 | 29.1025123545067 | 88.7222329816173 |
| 244.721649 | 25.9170859783068 | 101.448769935925 |

HDFC

| K | Call Price | Put Price |
|--------------|------------------|------------------|
| 526.1654665 | 554.214366257458 | 15.0578281019198 |
| 631.3985598 | 470.038880871602 | 33.5172216849562 |
| 736.6316531 | 395.527757043309 | 61.6409768255551 |
| 841.8647464 | 330.937615698972 | 99.6857144501103 |
| 947.0978397 | 275.817337255845 | 147.200314975875 |
| 1052.330933 | 229.312148805686 | 203.330005494609 |
| 1157.5640263 | 190.39300094859 | 267.045736606405 |
| 1262.7971196 | 158.005063841496 | 337.292678468203 |
| 1368.0302129 | 131.152638417236 | 413.075132012836 |
| 1473.2633062 | 108.940716152737 | 493.498088717229 |
| 1578.4963995 | 90.5895951506341 | 577.781846684019 |

HUL

| K | Call Price | Put Price |
|--------------|------------------|------------------|
| 882.242859 | 938.086963648786 | 34.0614508477006 |
| 1058.6914308 | 802.240221466815 | 70.3067497055126 |
| 1235.1400026 | 682.466652276105 | 122.625221554585 |
| 1411.5885744 | 578.583570219675 | 190.834180537938 |
| 1588.0371462 | 489.52897585737 | 273.871627215417 |
| 1764.485718 | 413.801380434863 | 370.236072832692 |
| 1940.9342898 | 349.754701289314 | 478.281434726927 |
| 2117.3828616 | 295.77390101173 | 596.392675489125 |
| 2293.8314334 | 250.36778510556 | 723.078600622738 |
| 2470.2800052 | 212.209430423553 | 857.012286980514 |
| 2646.728577 | 180.145824539431 | 997.040722136175 |

ICICI

| K | Call Price | Put Price |
|-------------|------------------|------------------|
| 179.1995695 | 209.291914781624 | 25.6678921461838 |
| 215.0394834 | 188.472243756763 | 39.8032443942353 |
| 250.8793973 | 170.207423517946 | 56.4934474283297 |
| 286.7193112 | 154.156265903704 | 75.3973130869998 |
| 322.5592251 | 140.013990503556 | 96.2100609597637 |
| 358.399139 | 127.516253521201 | 118.667347250321 |
| 394.2390529 | 116.436939378305 | 142.543056380337 |
| 430.0789668 | 106.583804148986 | 167.64494442393 |
| 465.9188807 | 97.7937107243703 | 193.809874272226 |
| 501.7587946 | 89.9281581979652 | 220.899345018733 |
| 537.5987085 | 82.8693481168266 | 248.795558210507 |

INFOSYS

| K | Call Price | Put Price |
|-------------|------------------|------------------|
| 308.6384275 | 330.184436322502 | 13.92569889609 |
| 370.366113 | 283.729315669566 | 27.6742017578715 |
| 432.0937985 | 242.841565541099 | 46.9900751441226 |
| 493.821484 | 207.356486719177 | 71.7086198369174 |
| 555.5491695 | 176.857020501667 | 101.412777134125 |
| 617.276855 | 150.811563379102 | 135.570943526277 |
| 679.0045405 | 128.661084823367 | 173.62408848526 |
| 740.732226 | 109.868561773439 | 215.03518895005 |
| 802.4599115 | 93.9436842882974 | 259.313934979626 |
| 864.187597 | 80.4525362762892 | 306.026410482335 |
| 925.9152825 | 69.0187336542896 | 354.796231375053 |

IOC

| K | Call Price | Put Price |
|-------------|------------------|------------------|
| 56.8406945 | 67.3374020004951 | 9.09330575291941 |
| 68.2088334 | 60.9739943884153 | 13.8173566913245 |
| 79.5769723 | 55.3874273177066 | 19.3182481711007 |
| 90.9451112 | 50.4683505317256 | 25.4866299356045 |
| 102.3132501 | 46.121999119925 | 32.2277370742888 |
| 113.681389 | 42.2677479207386 | 39.4609444255872 |
| 125.0495279 | 38.8375064416723 | 47.1181614970058 |
| 136.4176668 | 35.7738799573757 | 55.141993563194 |
| 147.7858057 | 33.028443050848 | 63.4840152071513 |
| 159.1539446 | 30.5602357097165 | 72.1032664165046 |
| 170.5220835 | 28.334497216336 | 80.964986473609 |

ITC

| K | Call Price | Put Price |
|-------------|------------------|------------------|
| 131.4204865 | 142.843294476088 | 8.17802460312316 |
| 157.7045838 | 124.105895747357 | 15.0757664997994 |
| 183.9886811 | 107.658884615361 | 24.2638959932112 |
| 210.2727784 | 93.3558322006091 | 35.5959842038662 |
| 236.5568757 | 80.9889486674106 | 48.8642412960749 |
| 262.840973 | 70.3318608805735 | 63.8422941346449 |
| 289.1250703 | 61.163395266118 | 80.3089691455965 |
| 315.4091676 | 53.2794204019319 | 98.0601349068174 |
| 341.6932649 | 46.4976808125604 | 116.913535942853 |
| 367.9773622 | 40.6587425721044 | 136.709738327804 |
| 394.2614595 | 35.6249246476791 | 157.311061028786 |

JSWSTEEL

| K | Call Price | Put Price |
|-------------|------------------|------------------|
| 145.580261 | 171.320974568137 | 22.1463241171083 |
| 174.6963132 | 154.739133962937 | 33.9616578217035 |
| 203.8123654 | 140.186730970403 | 47.8064291389637 |
| 232.9284176 | 127.384653040698 | 63.4015255190527 |
| 262.0444698 | 116.087767399984 | 80.5018141881334 |
| 291.160522 | 106.085728780402 | 98.8969498783453 |
| 320.2765742 | 97.1998794038991 | 118.408274811637 |
| 349.3926264 | 89.2790438696975 | 138.884613587229 |
| 378.5086786 | 82.1953410658048 | 160.198085093131 |
| 407.6247308 | 75.8404226336234 | 182.240340970744 |
| 436.740783 | 70.1222462327526 | 204.919338879668 |

NTPC

| K | Call Price | Put Price |
|-------------|------------------|------------------|
| 53.8123895 | 57.5871406672075 | 2.44611853648688 |
| 64.5748674 | 49.4967120960765 | 4.85244133921169 |
| 75.3373453 | 42.3764164470545 | 8.2288970640456 |
| 86.0998232 | 36.1967364650656 | 12.5459684559126 |
| 96.8623011 | 30.8846088140758 | 17.7305921787786 |
| 107.624779 | 26.3473116795032 | 23.6900464180619 |
| 118.3872569 | 22.4875225764897 | 30.3270086889043 |
| 129.1497348 | 19.2118418272069 | 37.5480793134774 |
| 139.9122127 | 16.4350393001513 | 45.2680281602777 |
| 150.6746906 | 14.0817076592599 | 53.4114478932421 |
| 161.4371685 | 12.0864435932137 | 61.9129352010518 |

Reliance

| K | Call Price | Put Price |
|--------------|------------------|------------------|
| 555.3829345 | 676.995260313544 | 107.899872302776 |
| 666.4595214 | 619.216378181771 | 158.455086368849 |
| 777.5361083 | 568.402888837382 | 215.975693222307 |
| 888.6126952 | 523.493490109926 | 279.400390692697 |
| 999.6892821 | 483.60908010564 | 347.850076886258 |
| 1110.765869 | 448.023615395138 | 420.598708373603 |
| 1221.8424559 | 416.136182710754 | 497.045371887065 |
| 1332.9190428 | 387.447241102467 | 576.690526476624 |
| 1443.9956297 | 361.539285214192 | 659.116666786196 |
| 1555.0722166 | 338.061377109974 | 743.972854879825 |
| 1666.1488035 | 316.716841032489 | 830.962415000186 |

SBI

| K | Call Price | Put Price |
|-------------|------------------|------------------|
| 147.824997 | 181.128651280254 | 29.6538420999124 |
| 177.3899964 | 165.951940432026 | 43.3121682156162 |
| 206.9549958 | 152.600239035447 | 58.7955037829689 |
| 236.5199952 | 140.792219073338 | 75.8225207847911 |
| 266.0849946 | 130.296383312067 | 94.1617219874524 |
| 295.649994 | 120.922386607884 | 113.622762247201 |
| 325.2149934 | 112.51317118822 | 134.048583791468 |
| 354.7799928 | 104.938453230932 | 155.308902798112 |
| 384.3449922 | 98.089505268631 | 177.294991799743 |
| 413.9099916 | 91.8750263129267 | 199.915549807971 |
| 443.474991 | 86.2178809690998 | 223.093441428075 |

Sun Pharma

| K | Call Price | Put Price |
|-------------|------------------|------------------|
| 210.1600495 | 255.525374173212 | 40.1764545629271 |
| 252.1920594 | 233.518142283457 | 59.1634585511147 |
| 294.2240693 | 214.167168898942 | 80.8067210445433 |
| 336.2560792 | 197.070149344155 | 104.703937367699 |
| 378.2880891 | 181.892706464187 | 130.520730365674 |
| 420.320099 | 168.358049554398 | 157.980309333828 |
| 462.3521089 | 156.236731021462 | 186.853226678835 |
| 504.3841188 | 145.337801828252 | 216.948533363568 |
| 546.4161287 | 135.501550592802 | 248.106518006061 |
| 588.4481386 | 126.593662577668 | 280.19286586887 |
| 630.4801485 | 118.500554698041 | 313.093993867186 |

TATA Steel

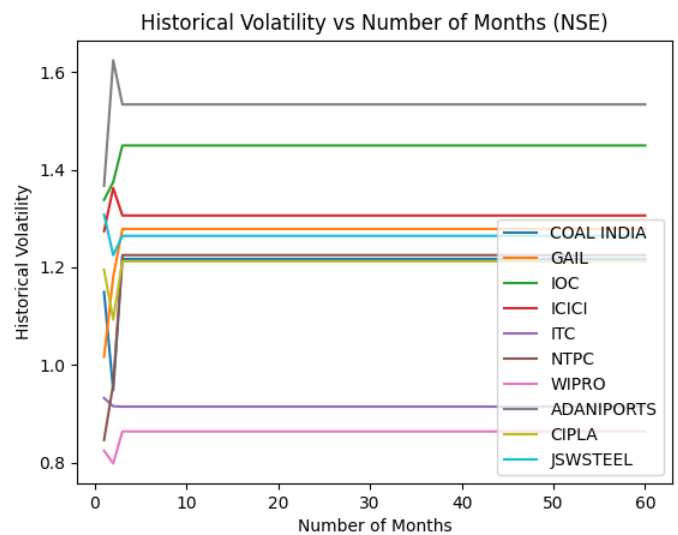
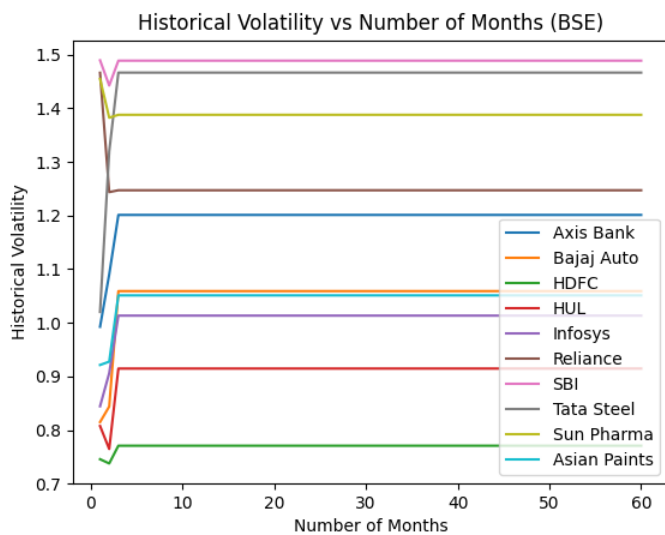
| K | Call Price | Put Price |
|-------------|------------------|------------------|
| 247.856003 | 274.114900755328 | 20.1393112369524 |
| 297.4272036 | 240.629196674584 | 35.0008904525329 |
| 346.9984042 | 211.273971695957 | 53.9929487702306 |
| 396.5696048 | 185.680762782277 | 76.747023152876 |
| 446.1408054 | 163.429758588875 | 102.843302255798 |
| 495.712006 | 144.10440922909 | 131.865236192338 |
| 545.2832066 | 127.317780034994 | 163.425890294567 |
| 594.8544072 | 112.723179333962 | 197.17857288986 |
| 644.4256078 | 100.016448969073 | 232.819125821296 |
| 693.9968084 | 88.934099881915 | 270.084060030463 |
| 743.568009 | 79.2495957456115 | 308.746839190484 |

WIPRO

| K | Call Price | Put Price |
|-------------|------------------|------------------|
| 122.9455645 | 131.087230435071 | 5.10612913183999 |
| 147.5346774 | 112.351891493848 | 10.3527957299701 |
| 172.1237903 | 95.8471922694755 | 17.8301020449516 |
| 196.7129032 | 81.5284609710226 | 27.4933762858525 |
| 221.3020161 | 69.2388532204766 | 39.1857740746602 |
| 245.891129 | 58.7677401686014 | 52.6966665621387 |
| 270.4802419 | 49.888790768467 | 67.799722701358 |
| 295.0693548 | 42.3821596294004 | 84.2750971016452 |
| 319.6584677 | 36.0459290043322 | 101.920872015931 |
| 344.2475806 | 30.7008816972111 | 120.557830248163 |
| 368.8366935 | 26.1914119375406 | 140.030366027847 |

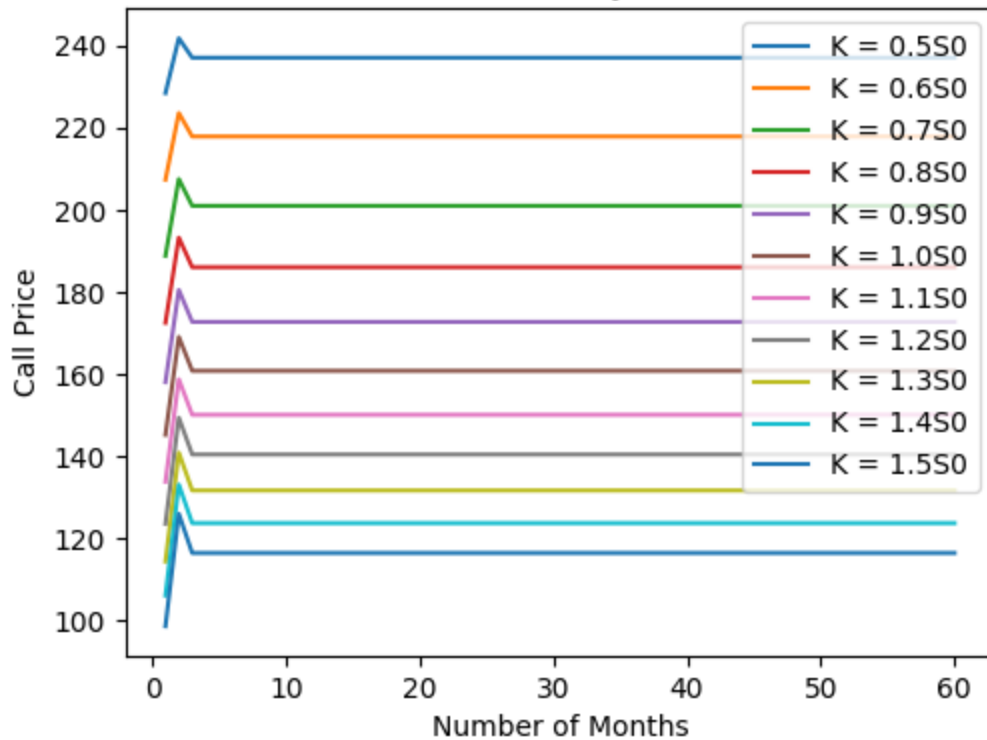
Question 3

The plot of volatility against the corresponding period length is -

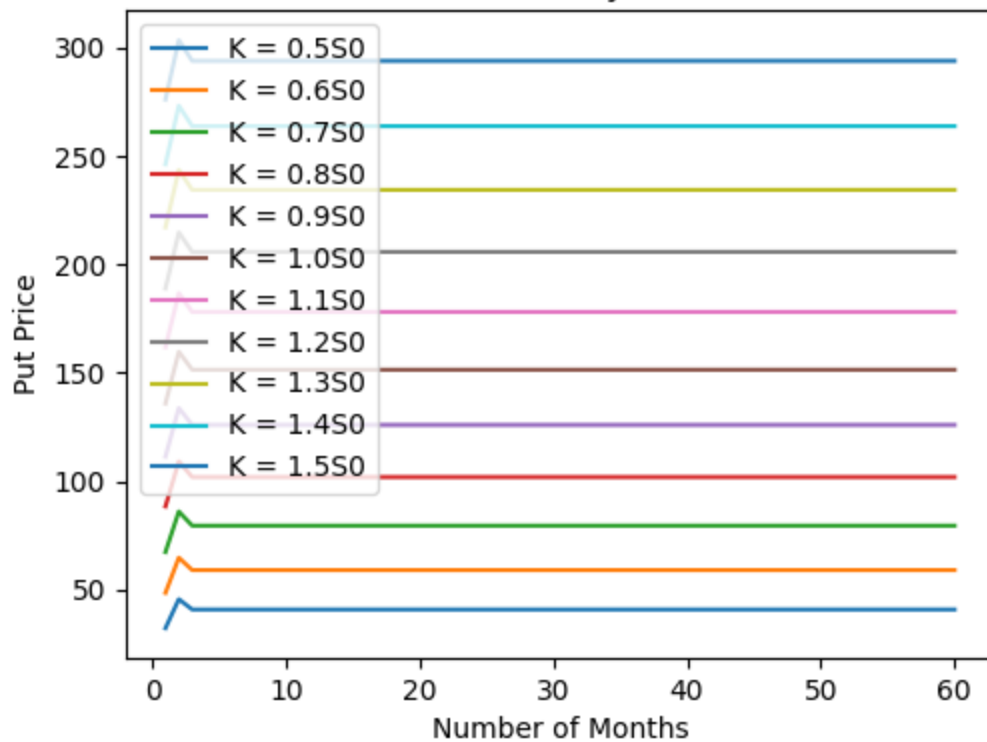


Now, the Option Prices are plotted against the corresponding period length.

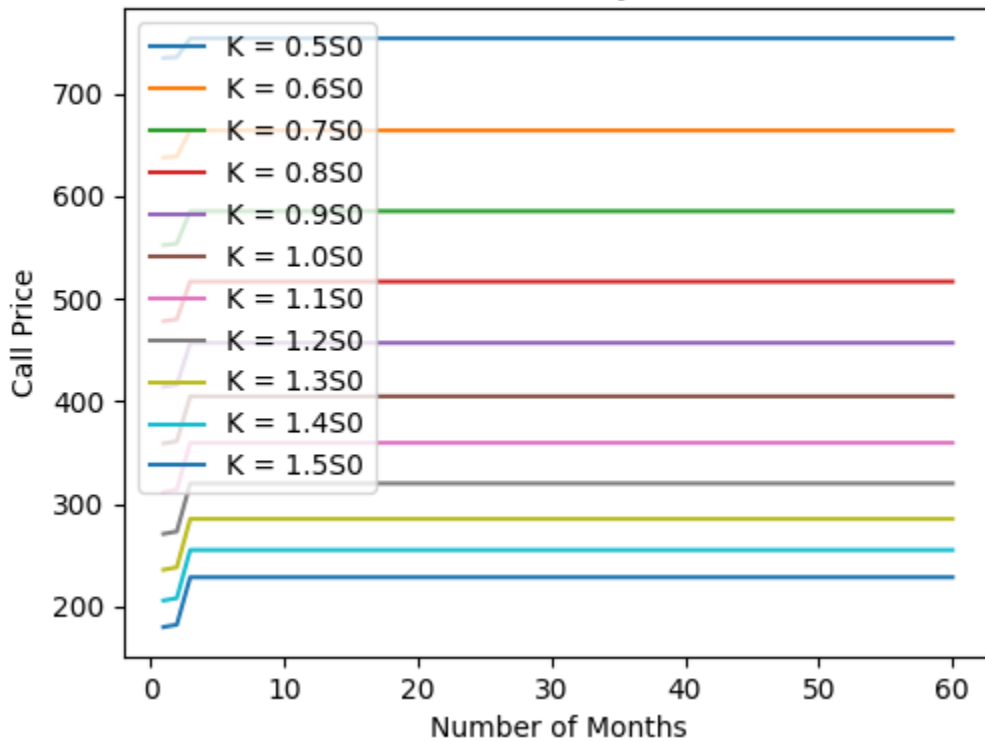
Call Price vs Historical Volatility for ADANI PORTS (NSE)



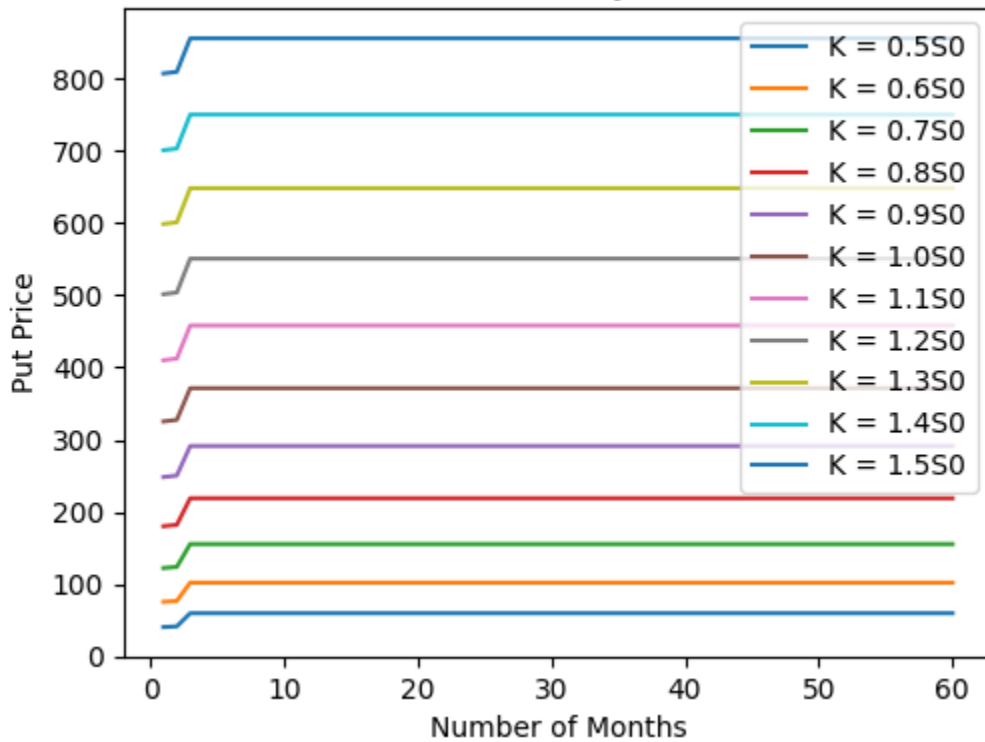
Put Price vs Historical Volatility for ADANI PORTS (NSE)



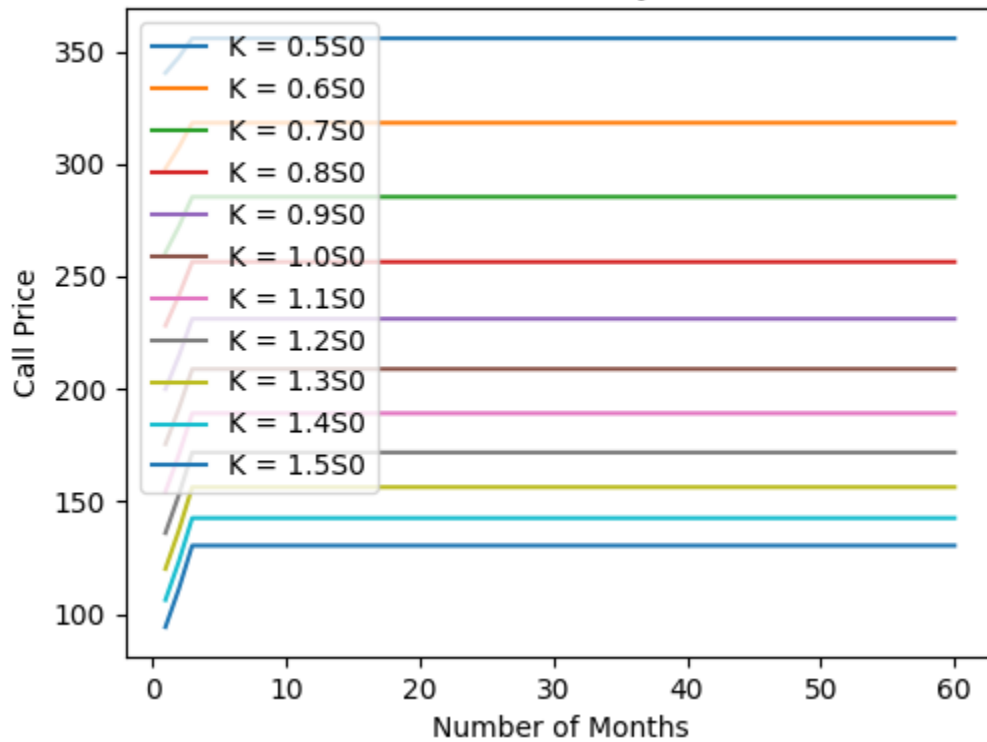
Call Price vs Historical Volatility for Asian Paints (BSE)



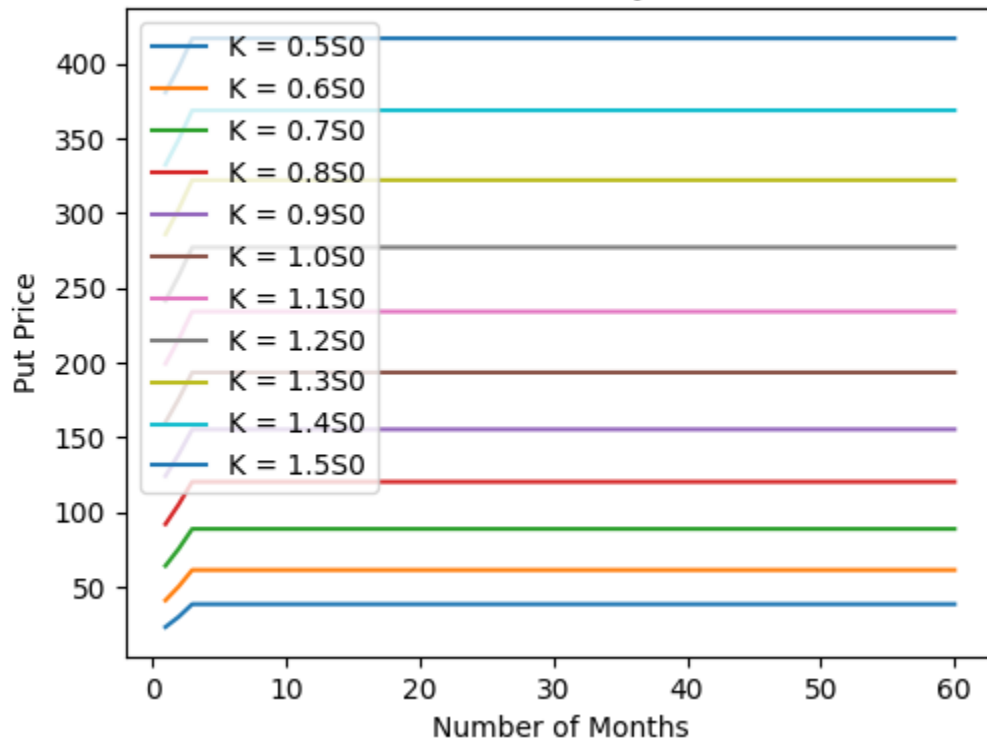
Put Price vs Historical Volatility for Asian Paints (BSE)



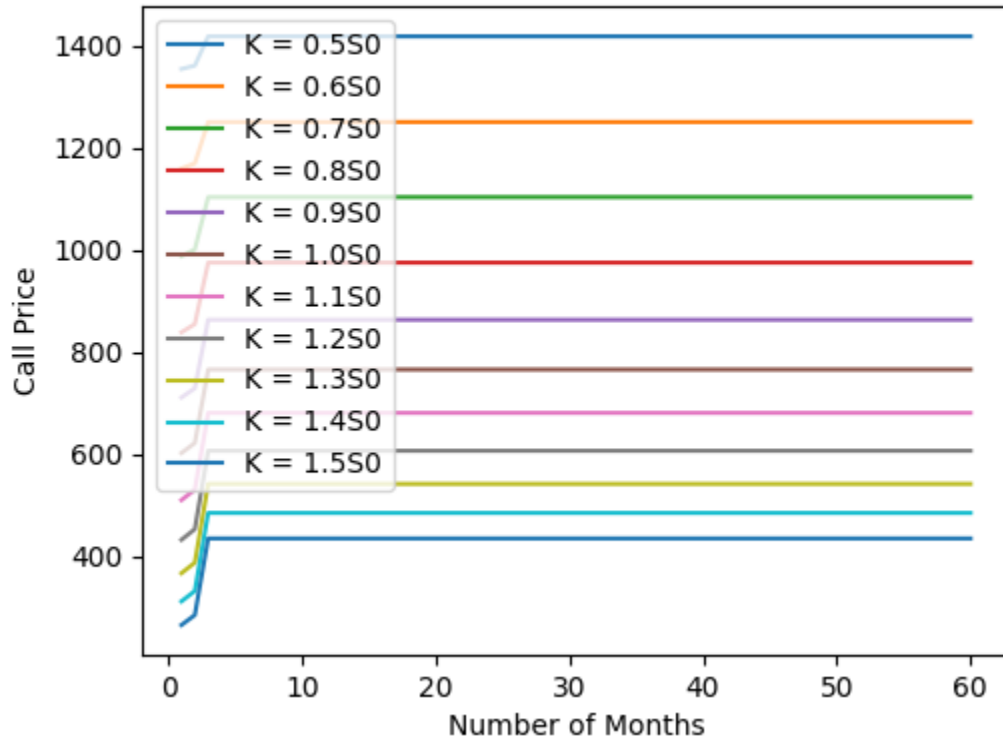
Call Price vs Historical Volatility for Axis Bank (BSE)



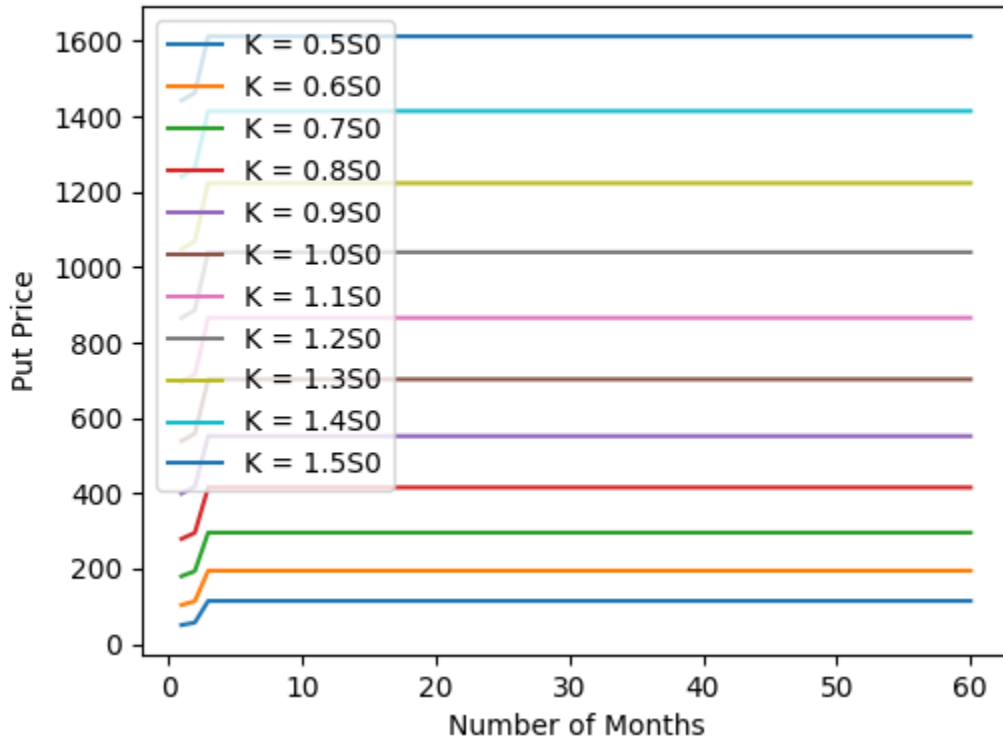
Put Price vs Historical Volatility for Axis Bank (BSE)



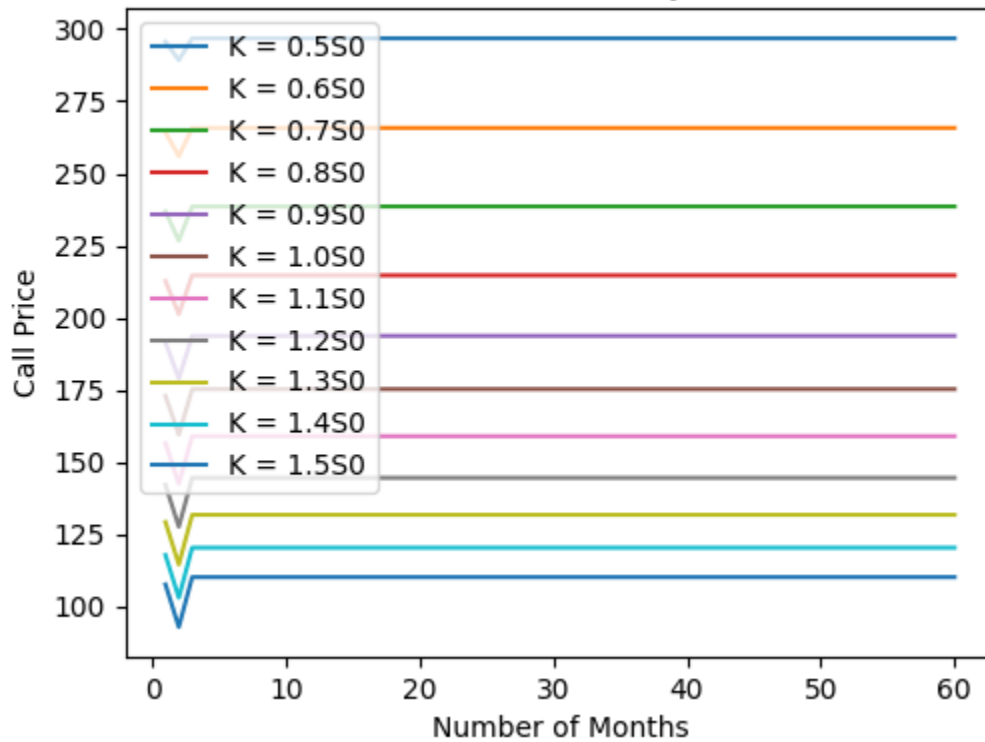
Call Price vs Historical Volatility for Bajaj Auto (BSE)



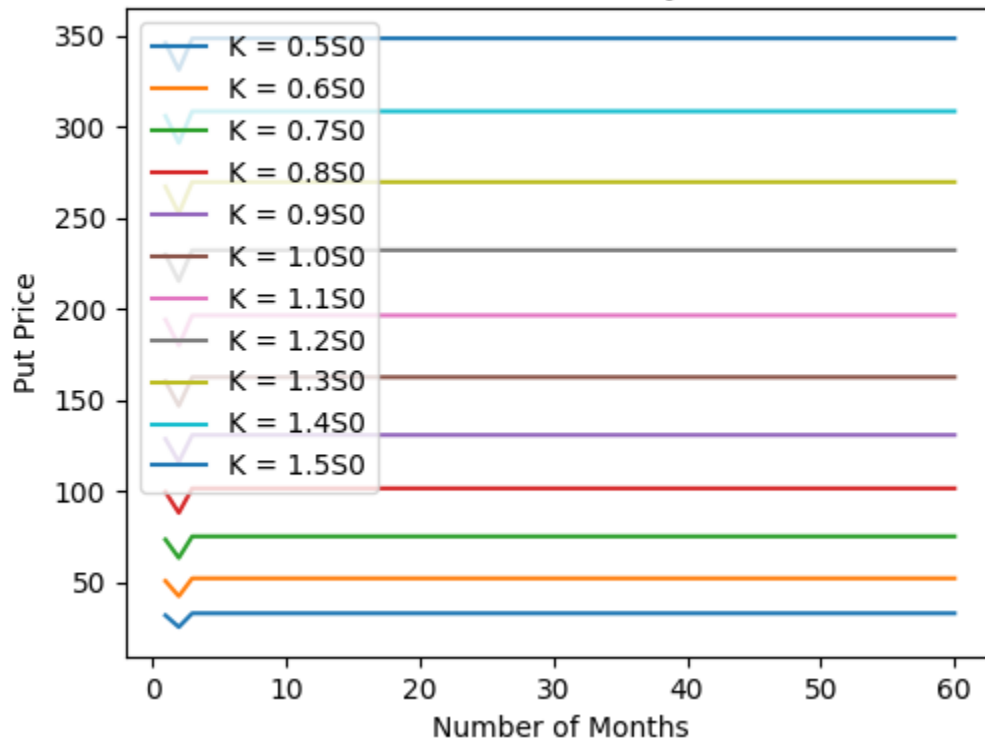
Put Price vs Historical Volatility for Bajaj Auto (BSE)



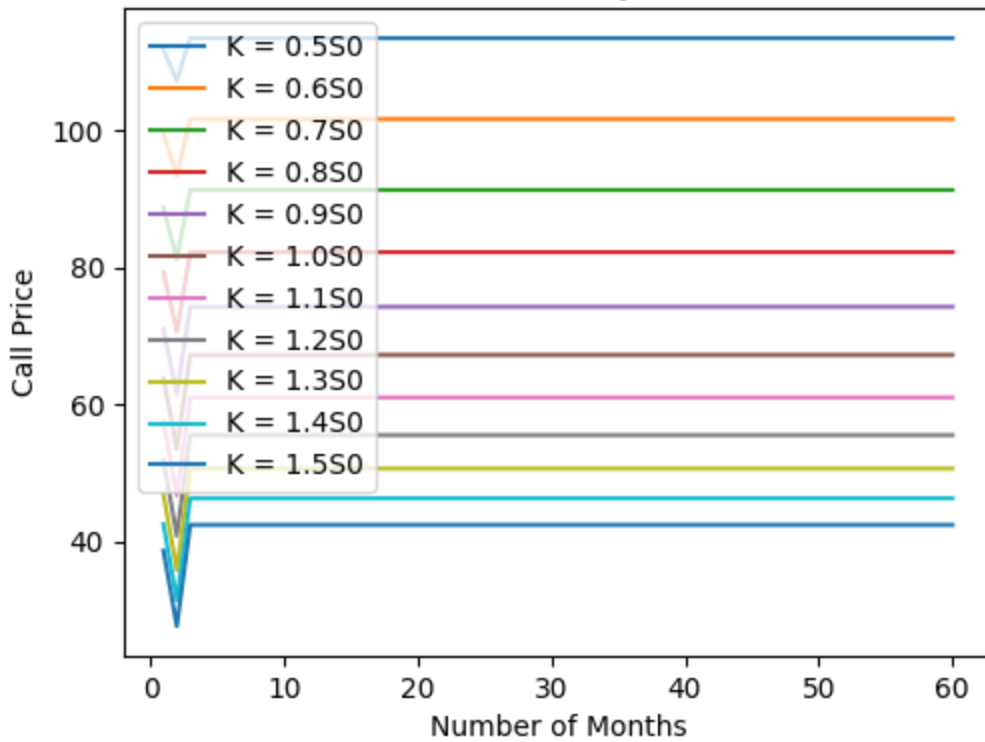
Call Price vs Historical Volatility for CIPLA (NSE)



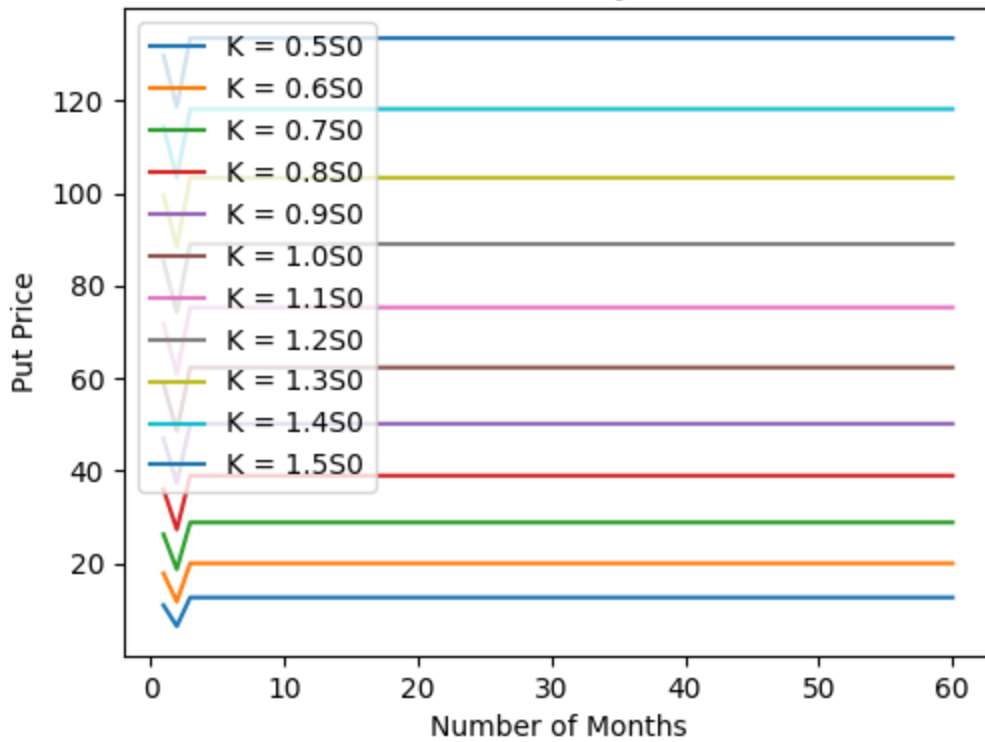
Put Price vs Historical Volatility for CIPLA (NSE)



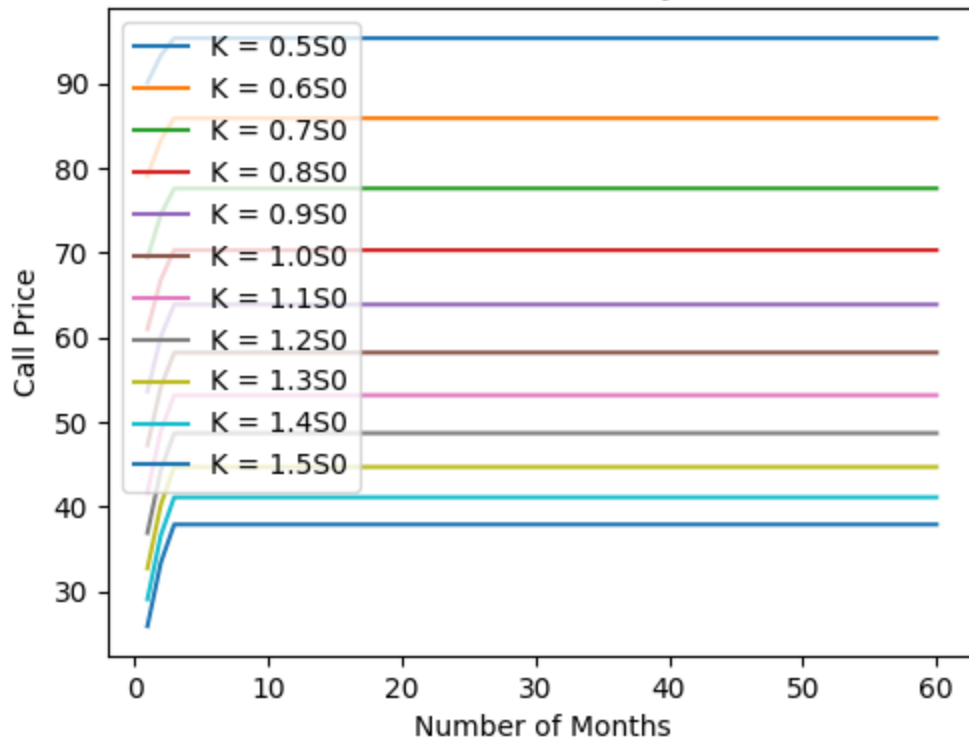
Call Price vs Historical Volatility for COAL INDIA (NSE)



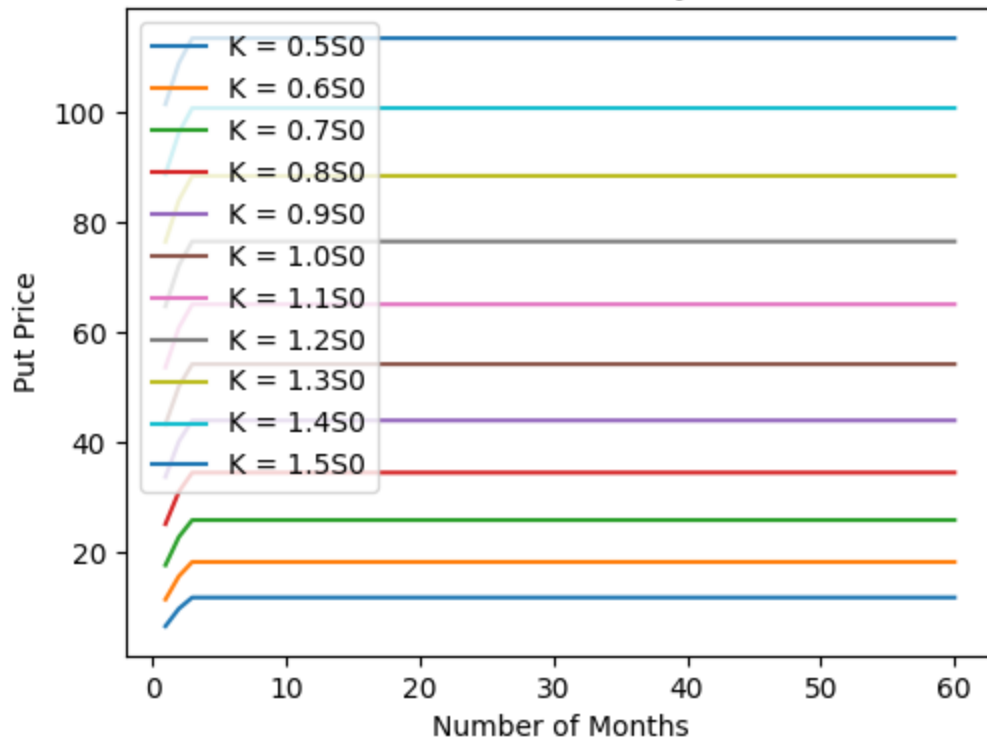
Put Price vs Historical Volatility for COAL INDIA (NSE)



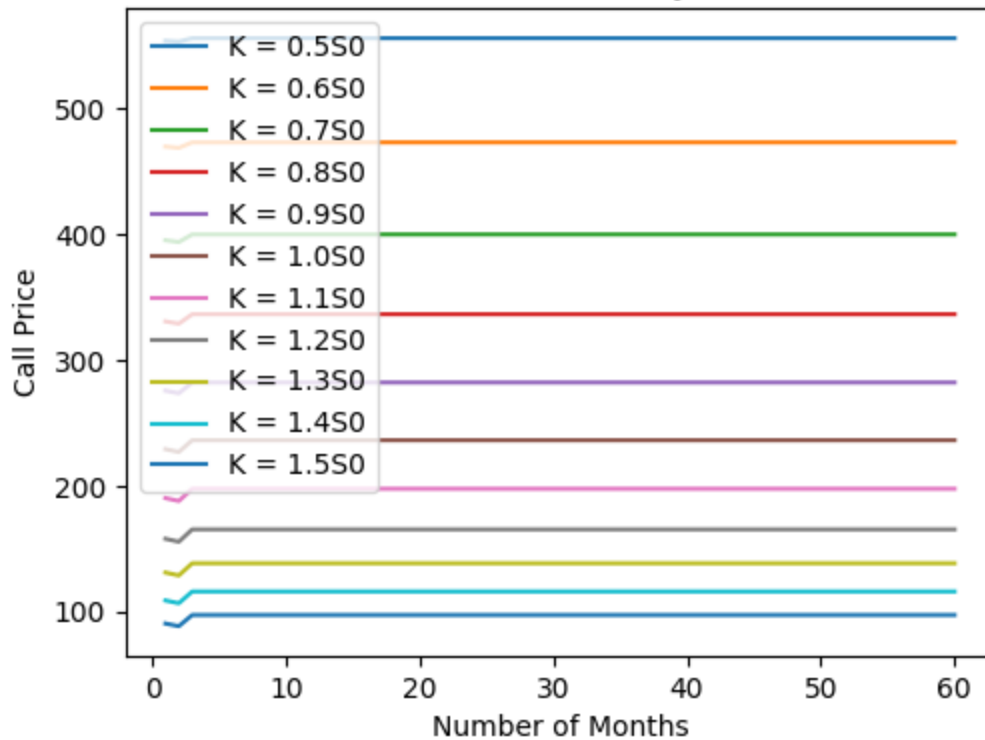
Call Price vs Historical Volatility for GAIL (NSE)



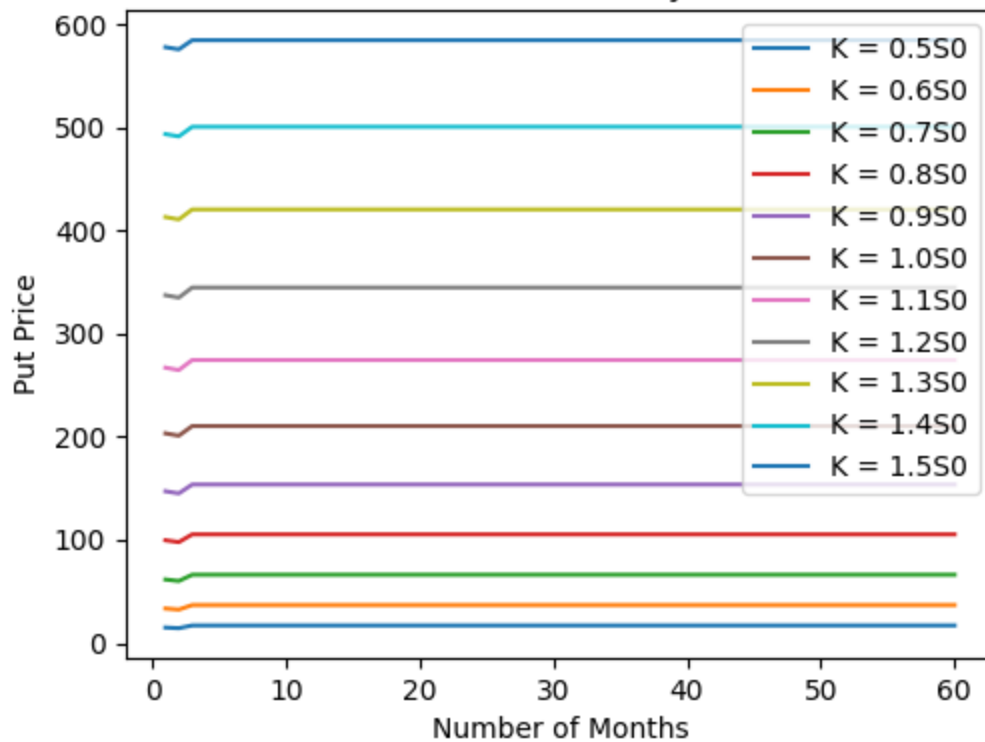
Put Price vs Historical Volatility for GAIL (NSE)



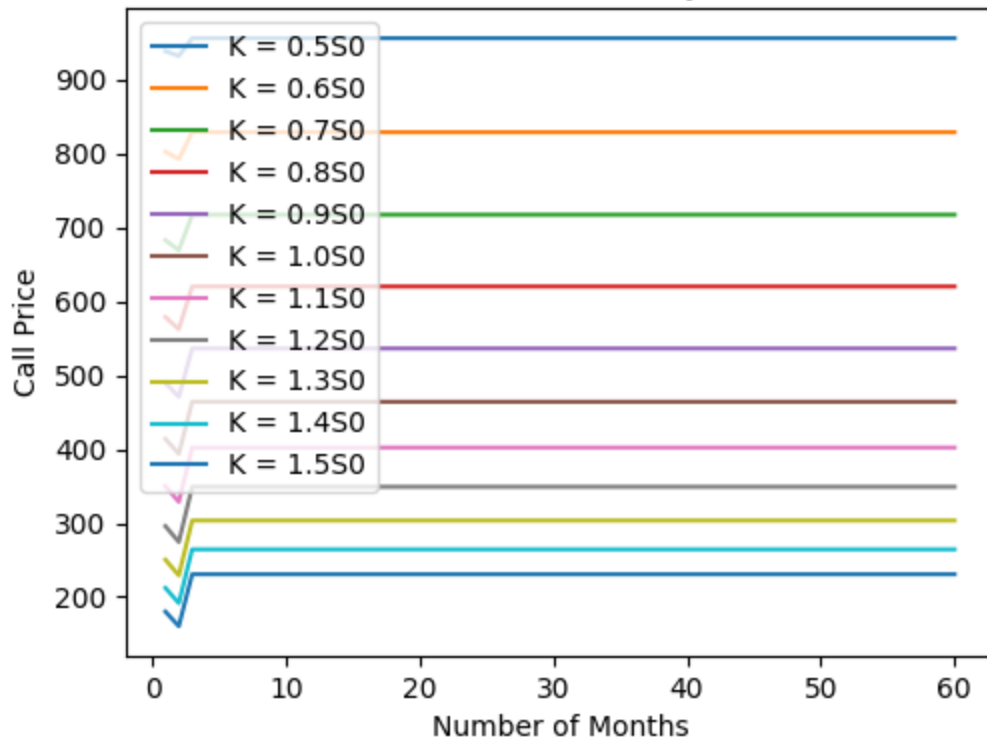
Call Price vs Historical Volatility for HDFC (BSE)



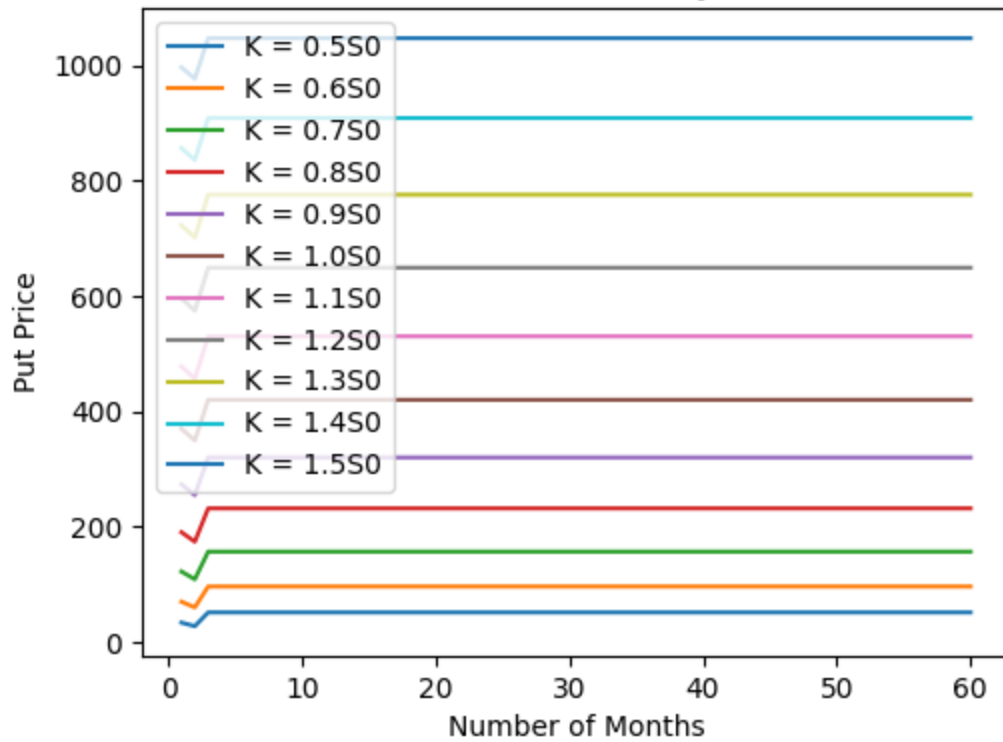
Put Price vs Historical Volatility for HDFC (BSE)



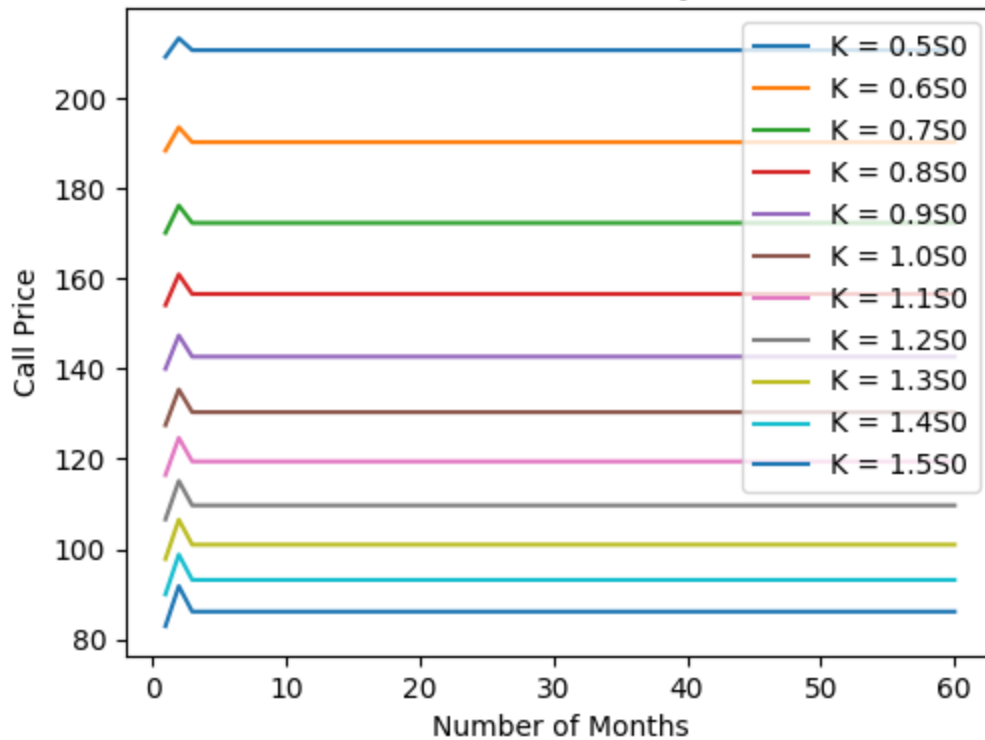
Call Price vs Historical Volatility for HUL (BSE)



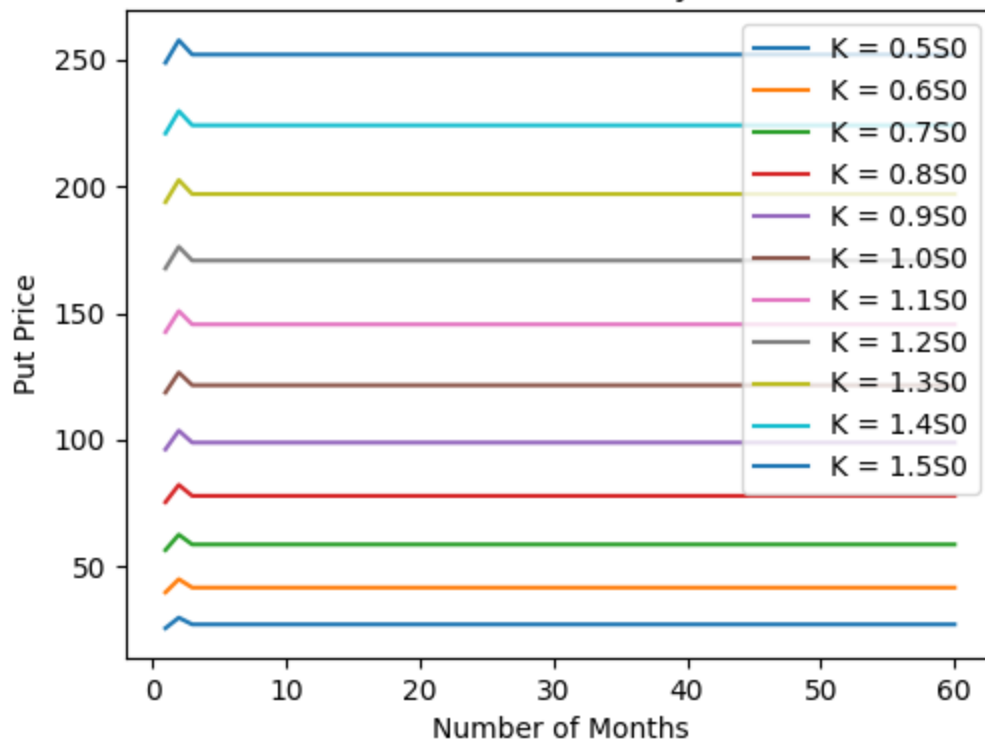
Put Price vs Historical Volatility for HUL (BSE)



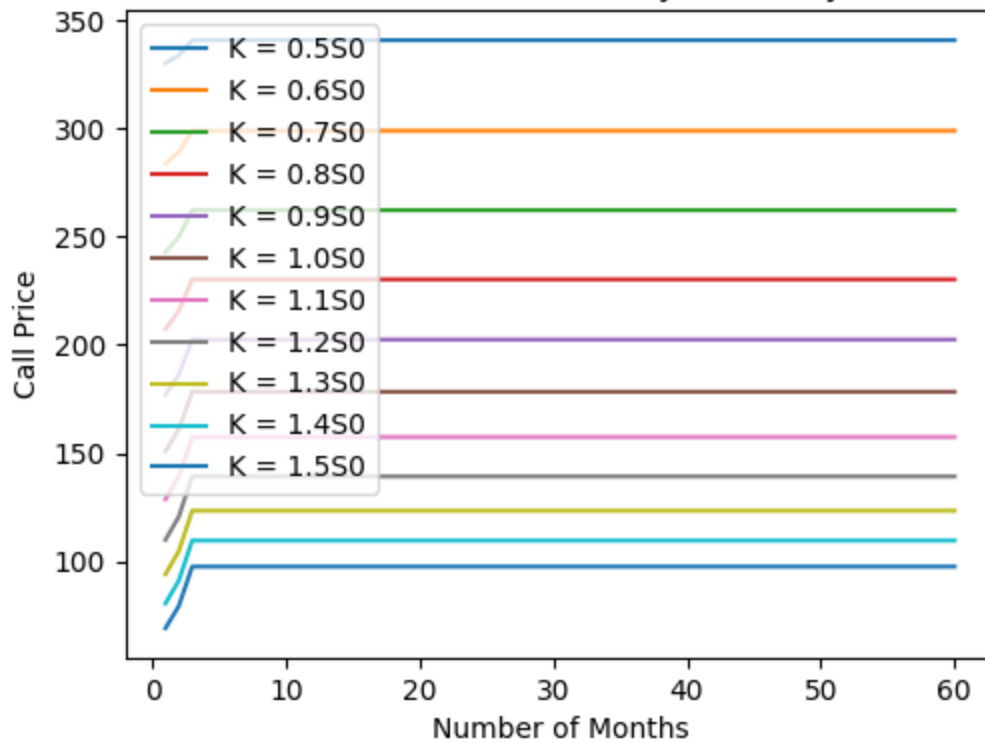
Call Price vs Historical Volatility for ICICI (NSE)



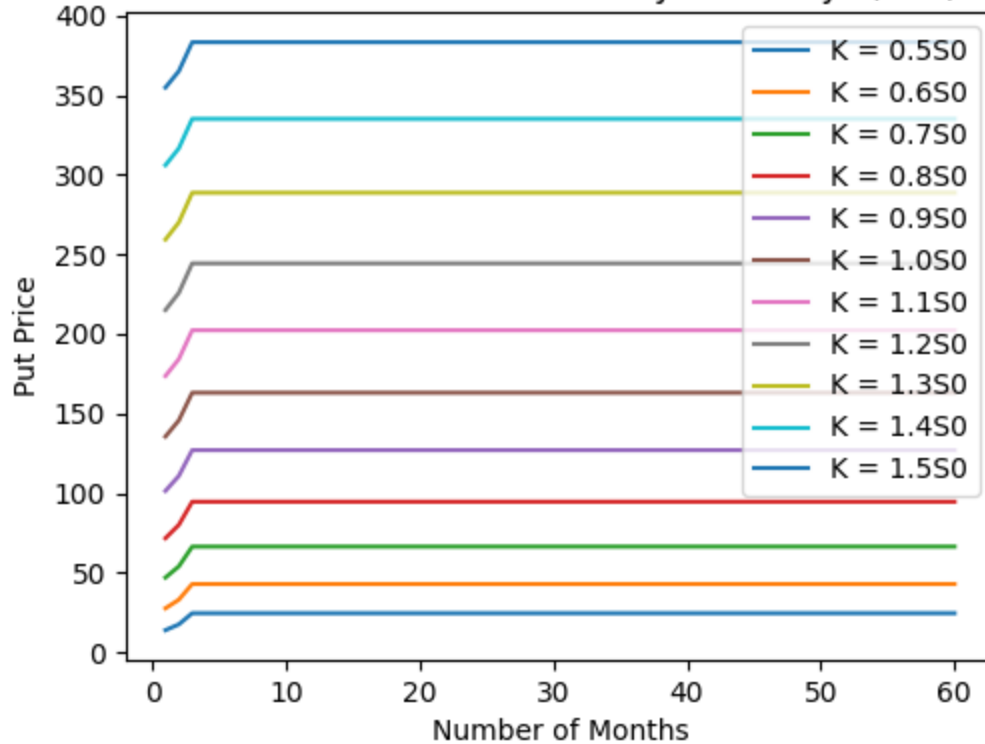
Put Price vs Historical Volatility for ICICI (NSE)



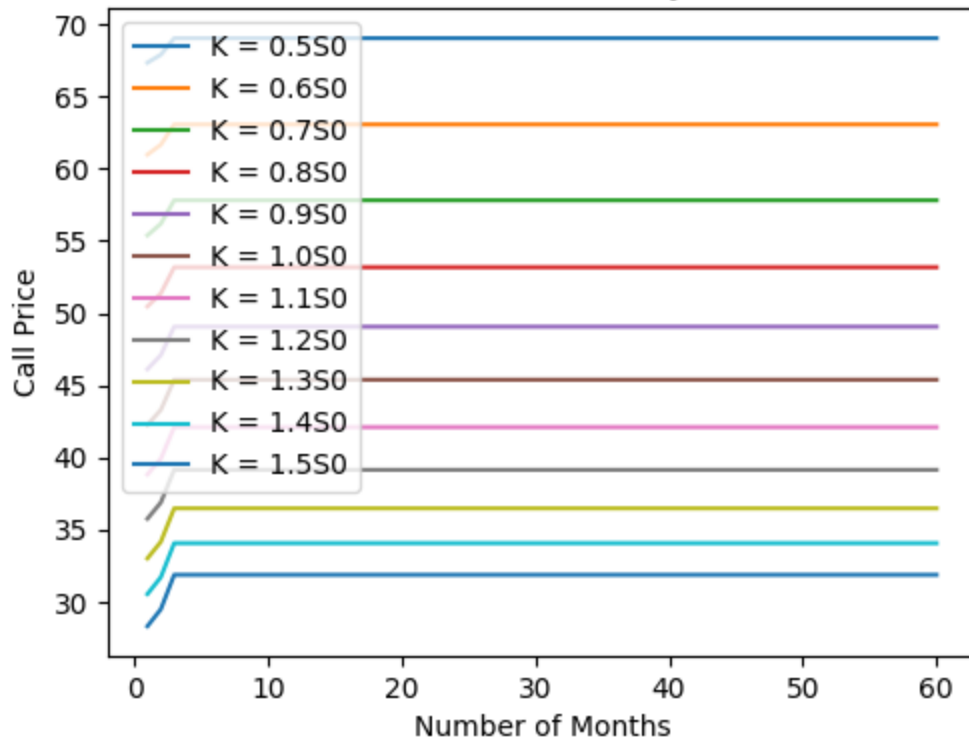
Call Price vs Historical Volatility for Infosys (BSE)



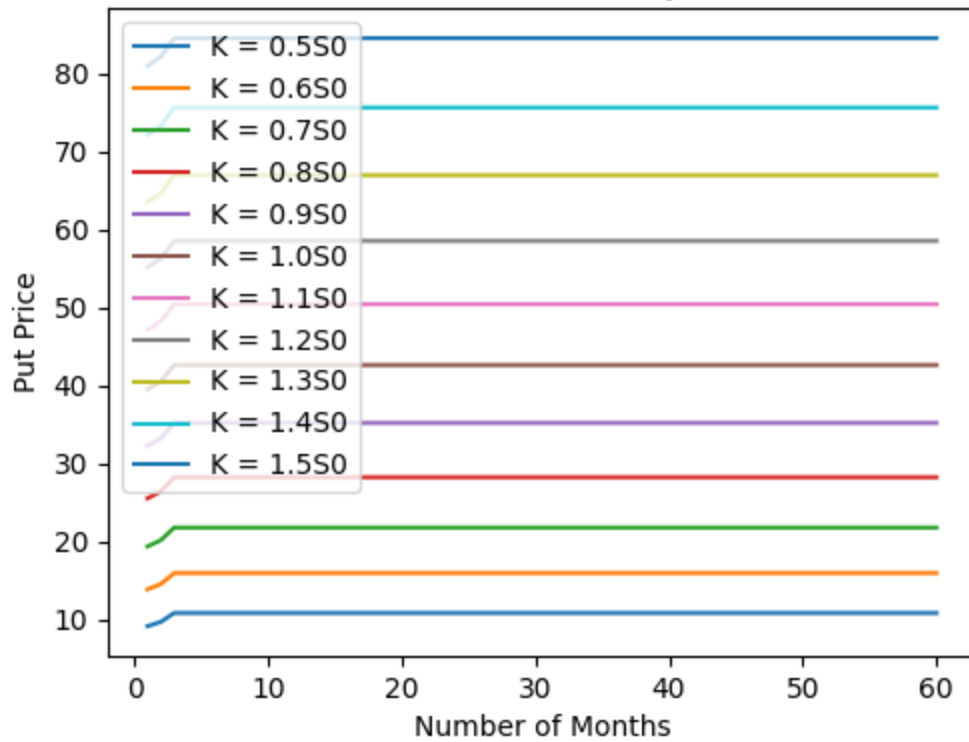
Put Price vs Historical Volatility for Infosys (BSE)



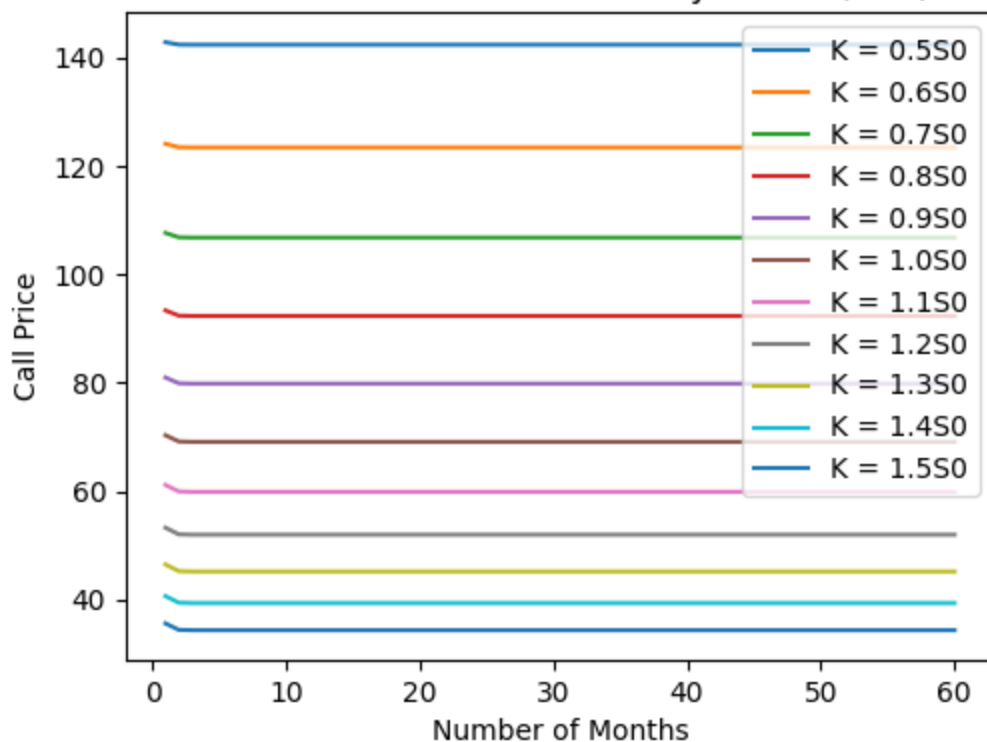
Call Price vs Historical Volatility for IOC (NSE)



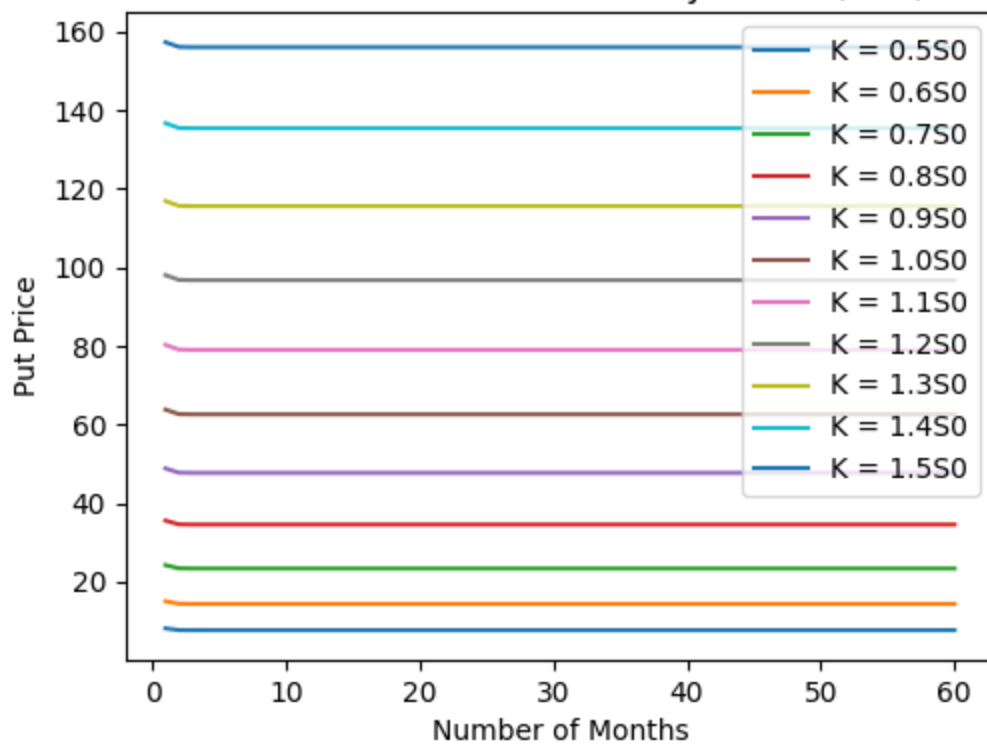
Put Price vs Historical Volatility for IOC (NSE)



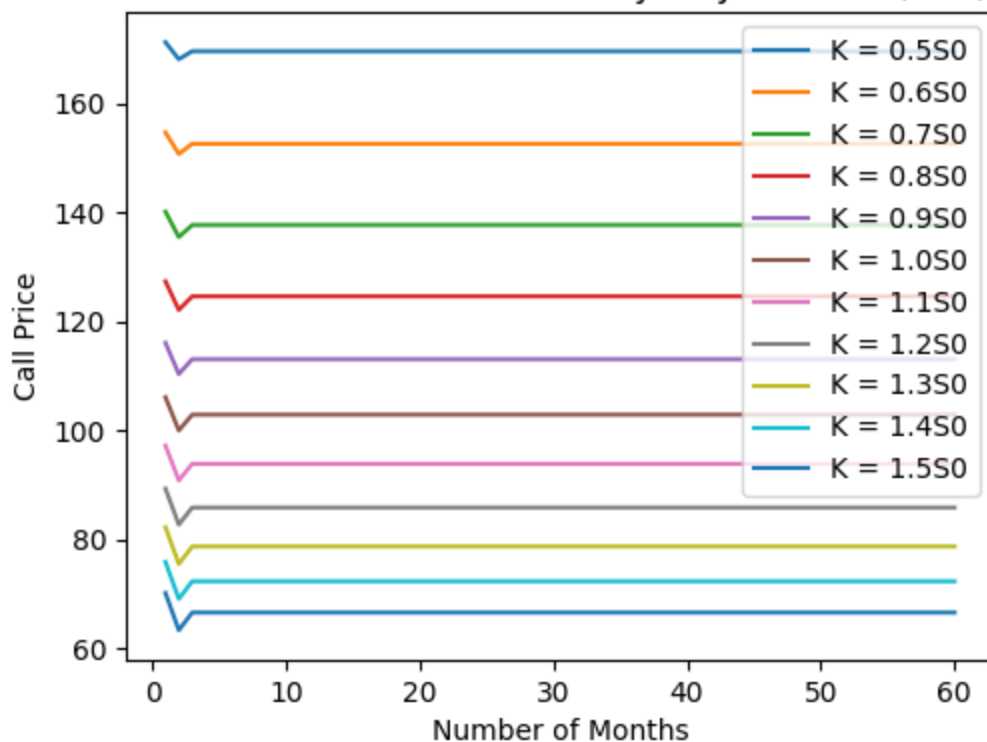
Call Price vs Historical Volatility for ITC (NSE)



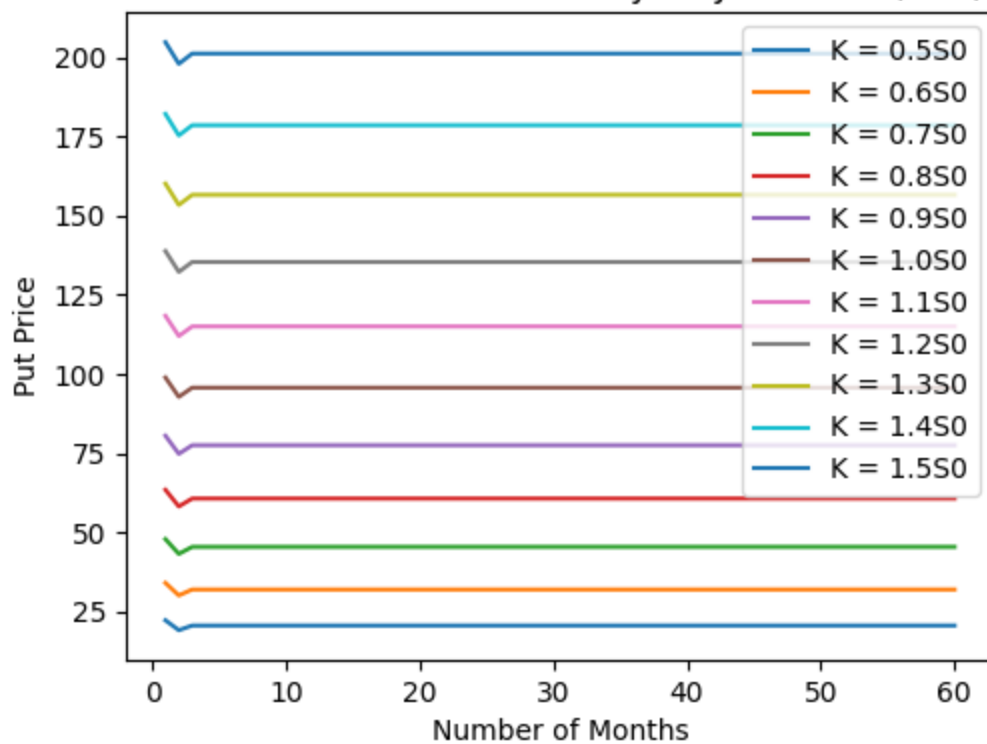
Put Price vs Historical Volatility for ITC (NSE)



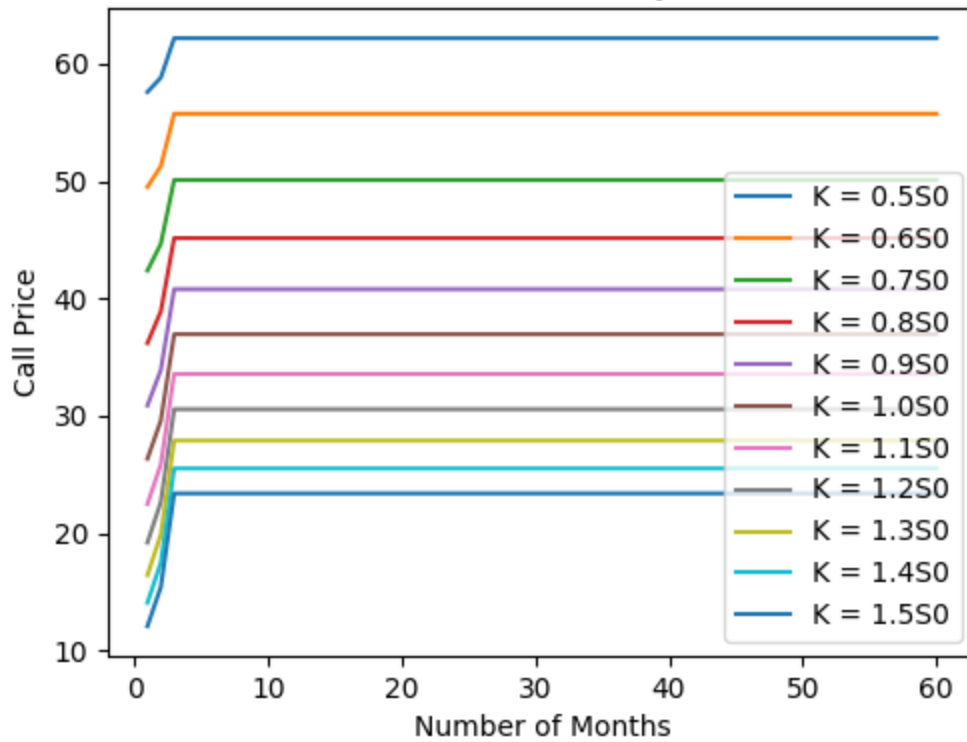
Call Price vs Historical Volatility for JSWSTEEL (NSE)



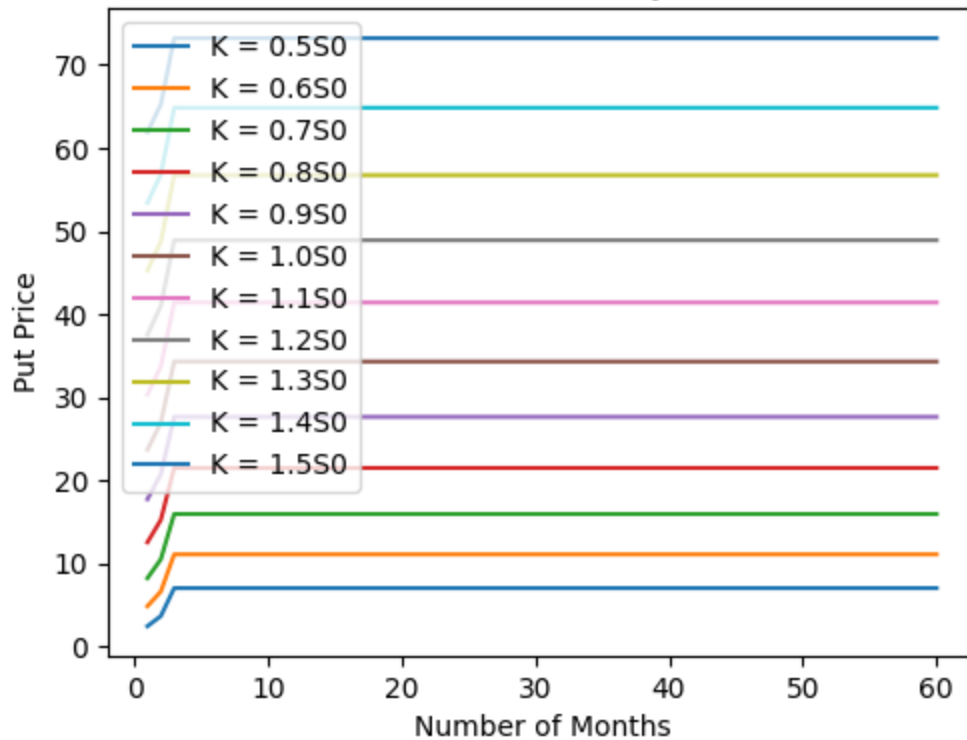
Put Price vs Historical Volatility for JSWSTEEL (NSE)



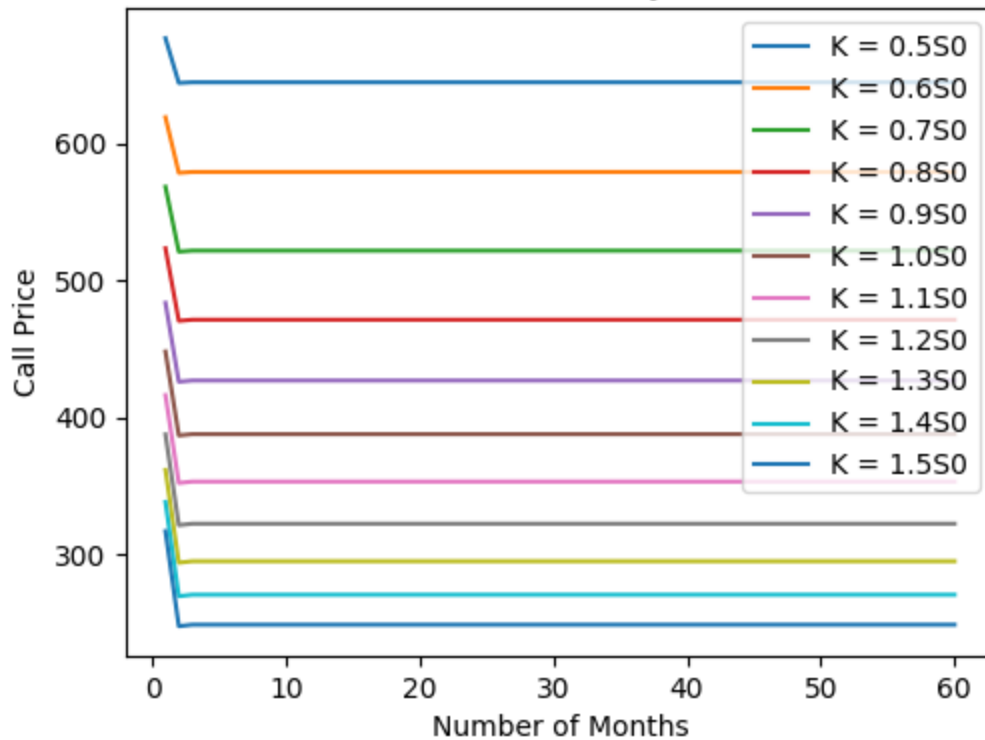
Call Price vs Historical Volatility for NTPC (NSE)



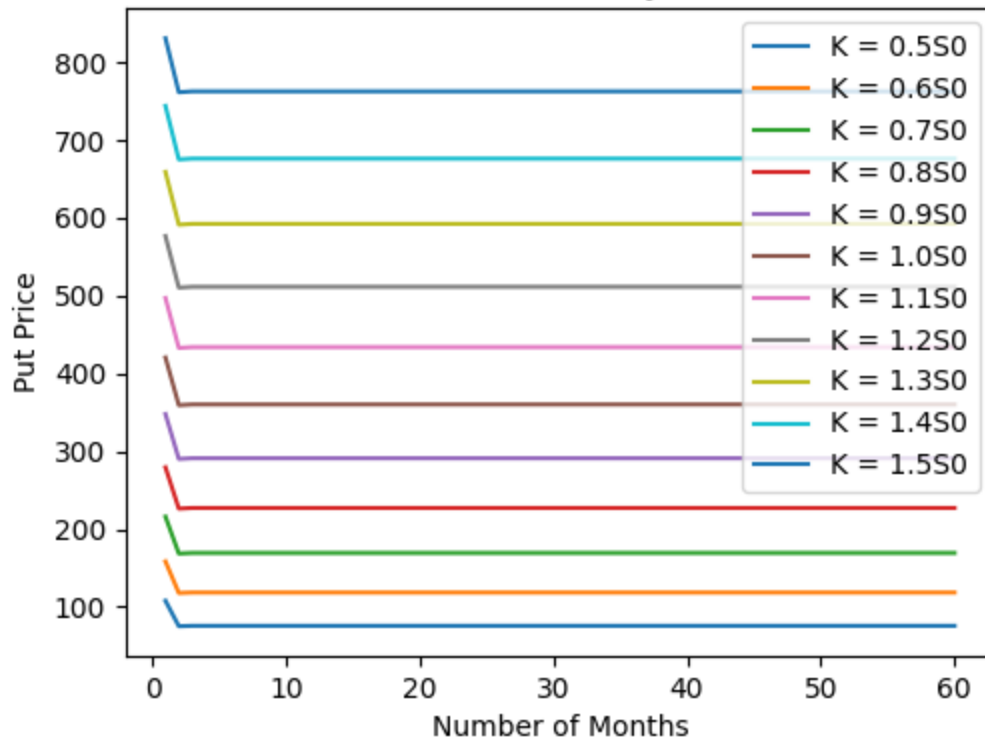
Put Price vs Historical Volatility for NTPC (NSE)



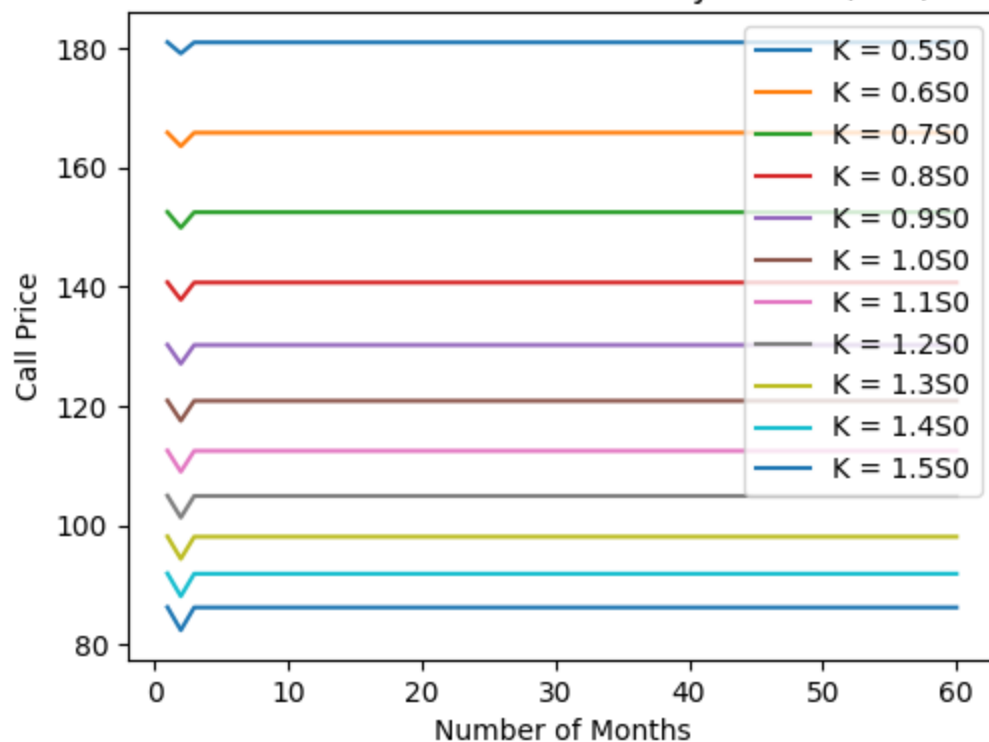
Call Price vs Historical Volatility for Reliance (BSE)



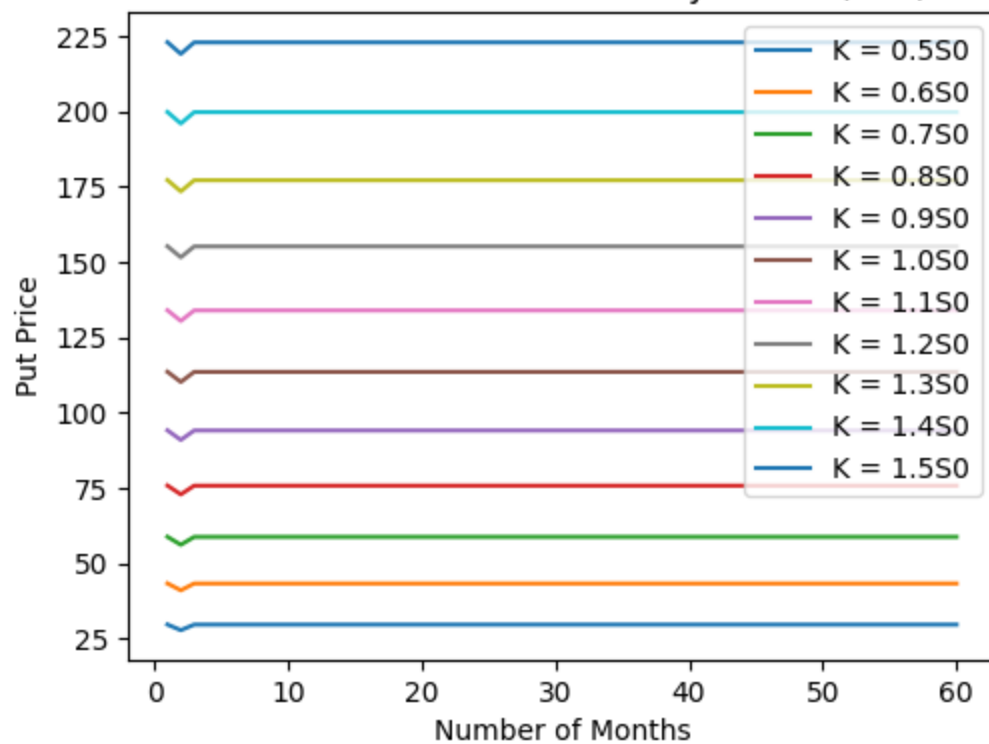
Put Price vs Historical Volatility for Reliance (BSE)



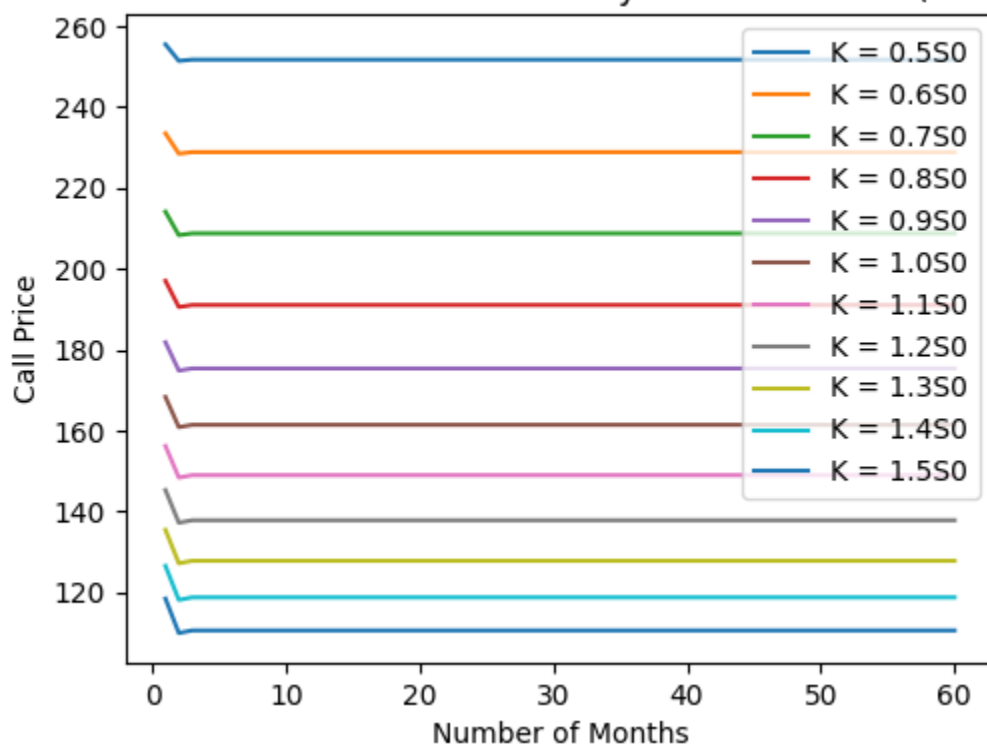
Call Price vs Historical Volatility for SBI (BSE)



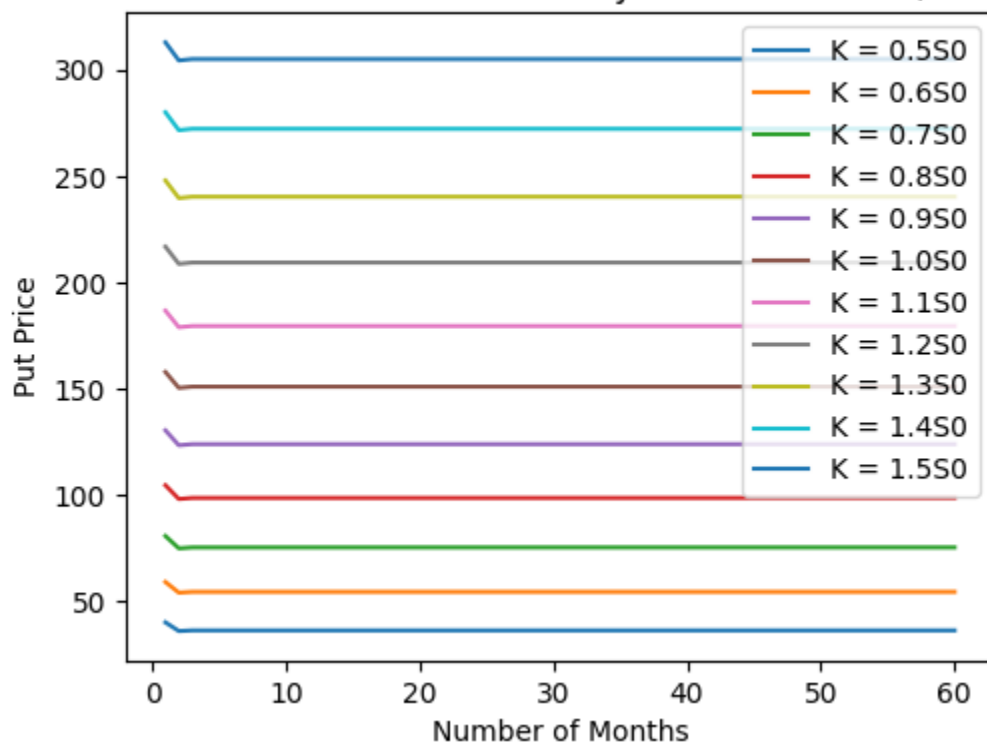
Put Price vs Historical Volatility for SBI (BSE)



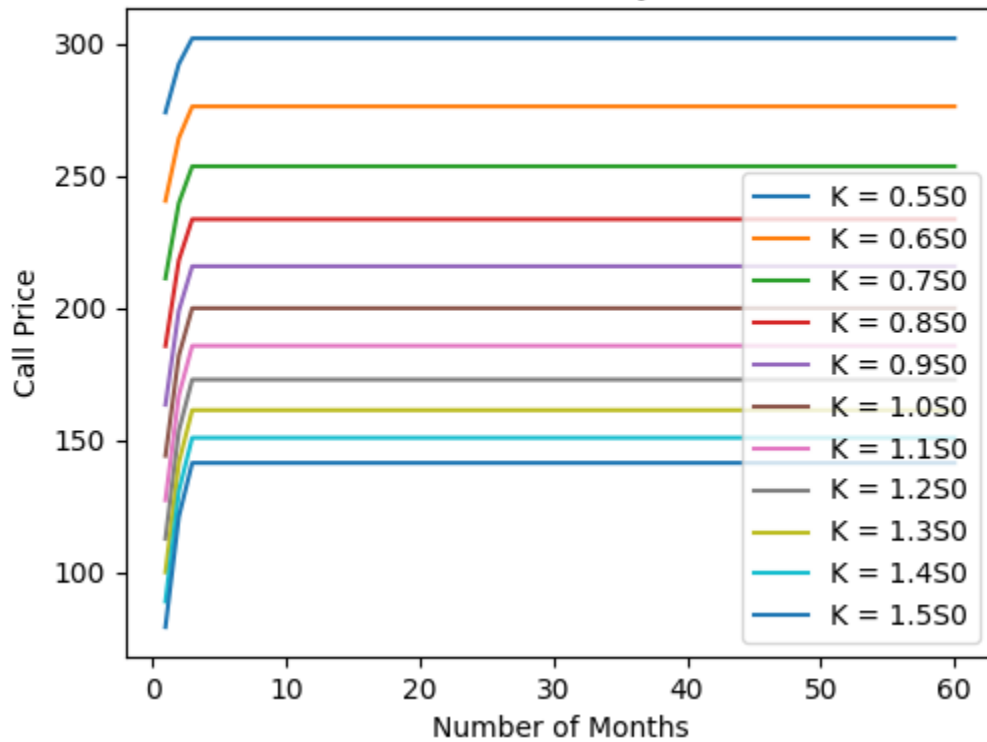
Call Price vs Historical Volatility for Sun Pharma (BSE)



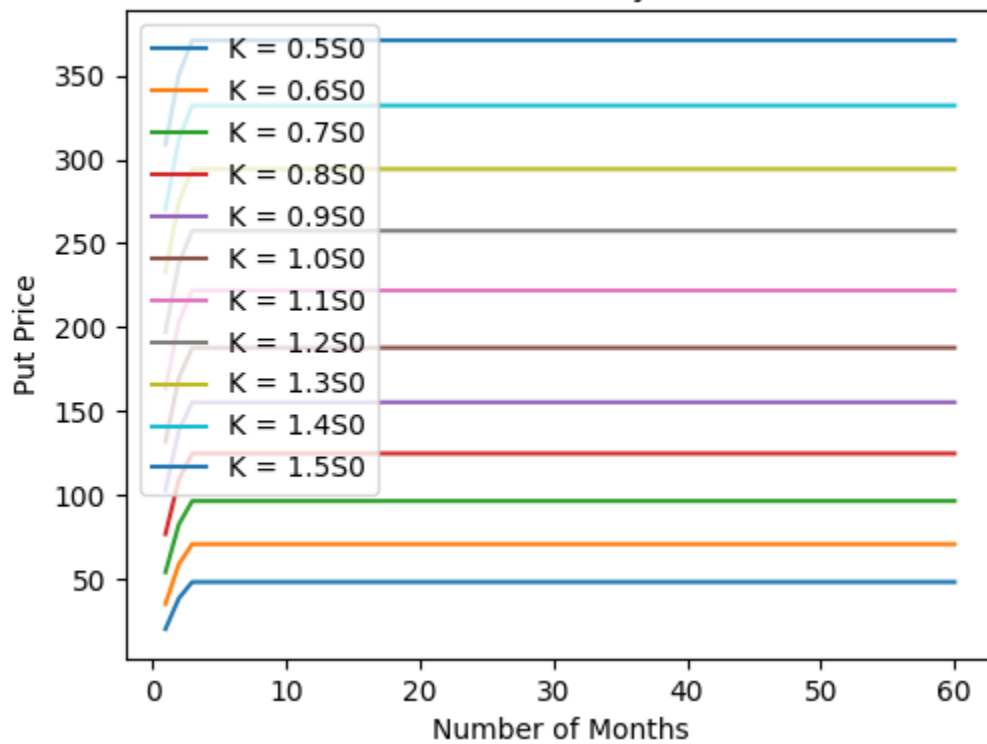
Put Price vs Historical Volatility for Sun Pharma (BSE)



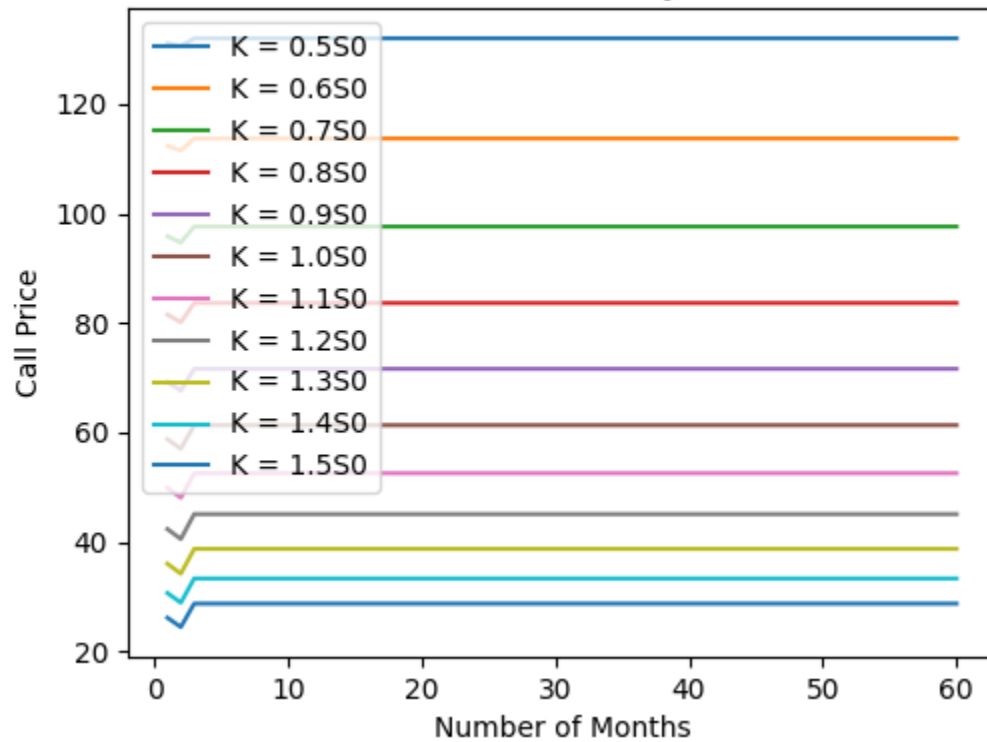
Call Price vs Historical Volatility for Tata Steel (BSE)



Put Price vs Historical Volatility for Tata Steel (BSE)



Call Price vs Historical Volatility for WIPRO (NSE)



Put Price vs Historical Volatility for WIPRO (NSE)

