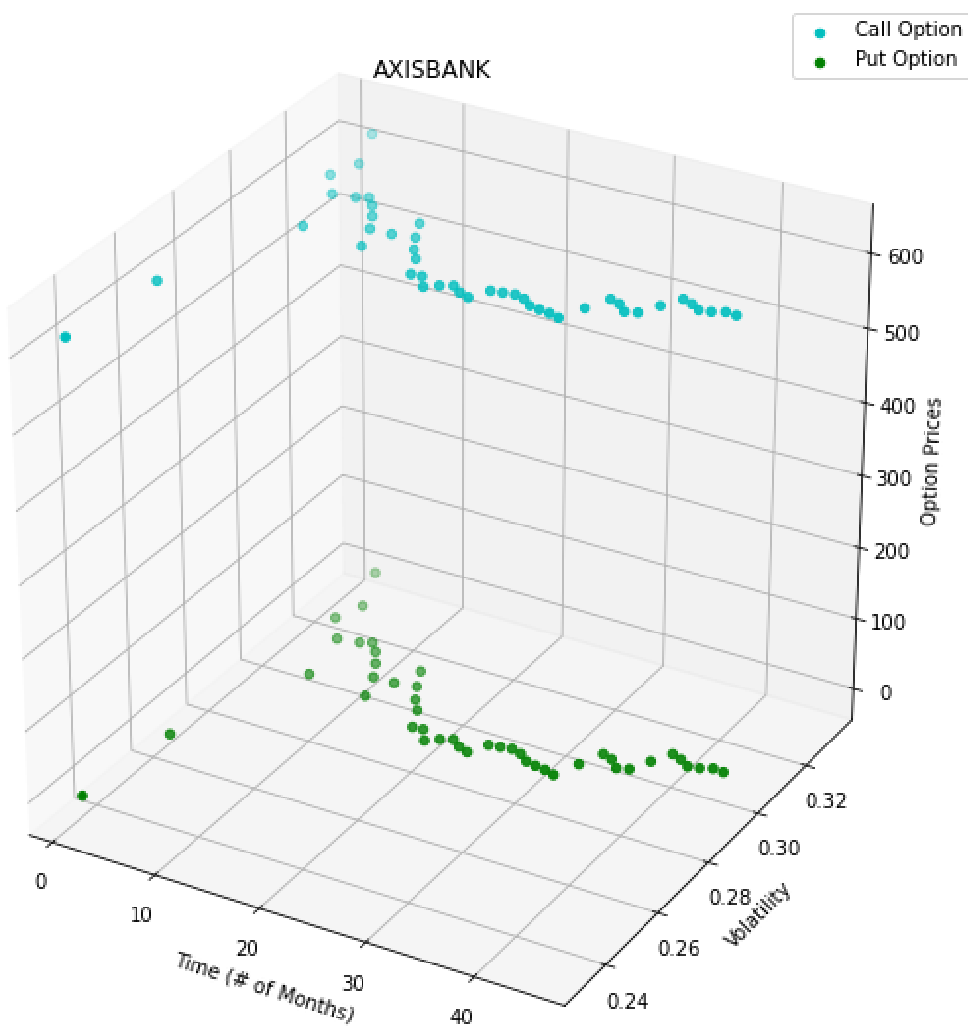
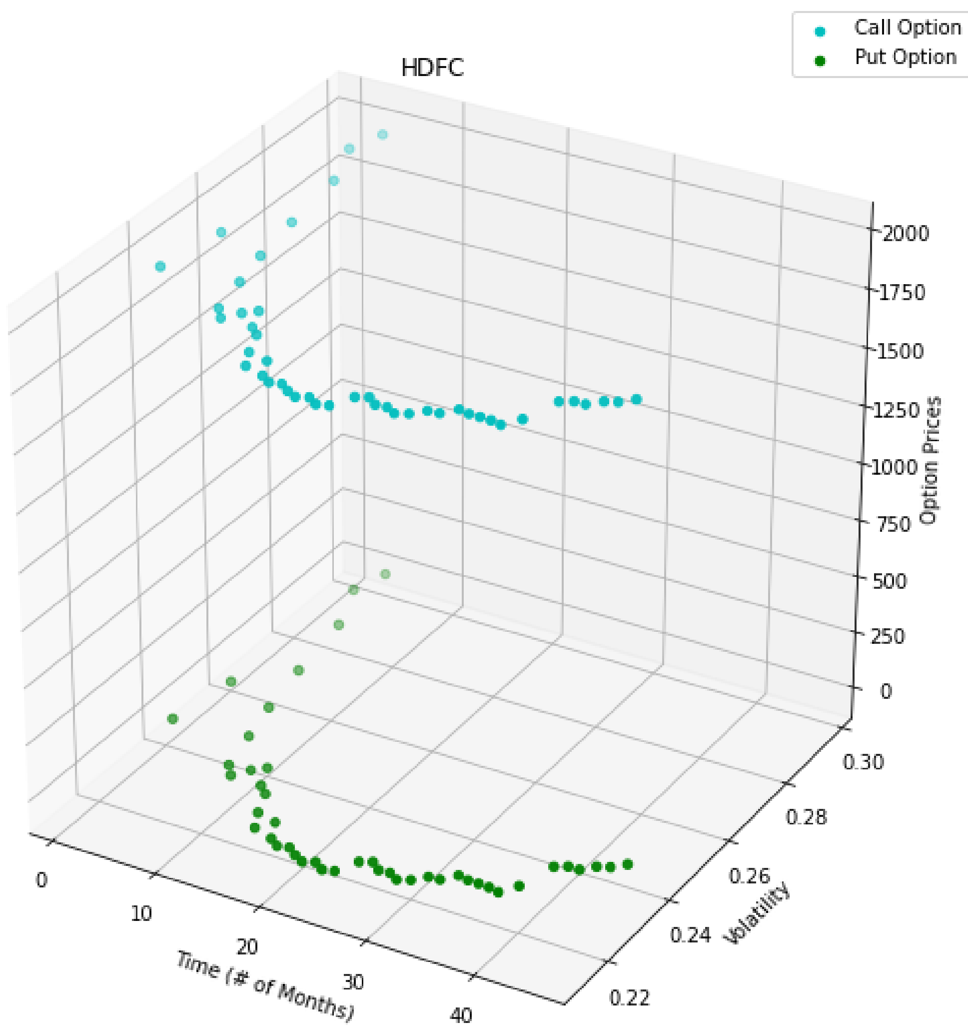
Lab 8 observations

May 25, 2020

```
                Stock : AXISBANK        Market : BSE
Part A
Historical Volatility of last one month's data = 0.23192
Part B
Call Prices for different K values = [618.75041 619.25754 618.17265 619.68747]
Put Prices for different K values= [0.08857 0.02662 0.19369 0.0013 ]
```



```
--------------------------------------------------------------------------------

                Stock : HDFC    Market : BSE
Part A
Historical Volatility of last one month's data = 0.2393
Part B
Call Prices for different K values = [1966.73215 1968.30082 1964.9572
1969.64424]
Put Prices for different K values= [0.34968 0.10958 0.74524 0.00599]
```




```
--------------------------------------------------------------------------------
```

Stock : ICICIBANK   Market : BSE

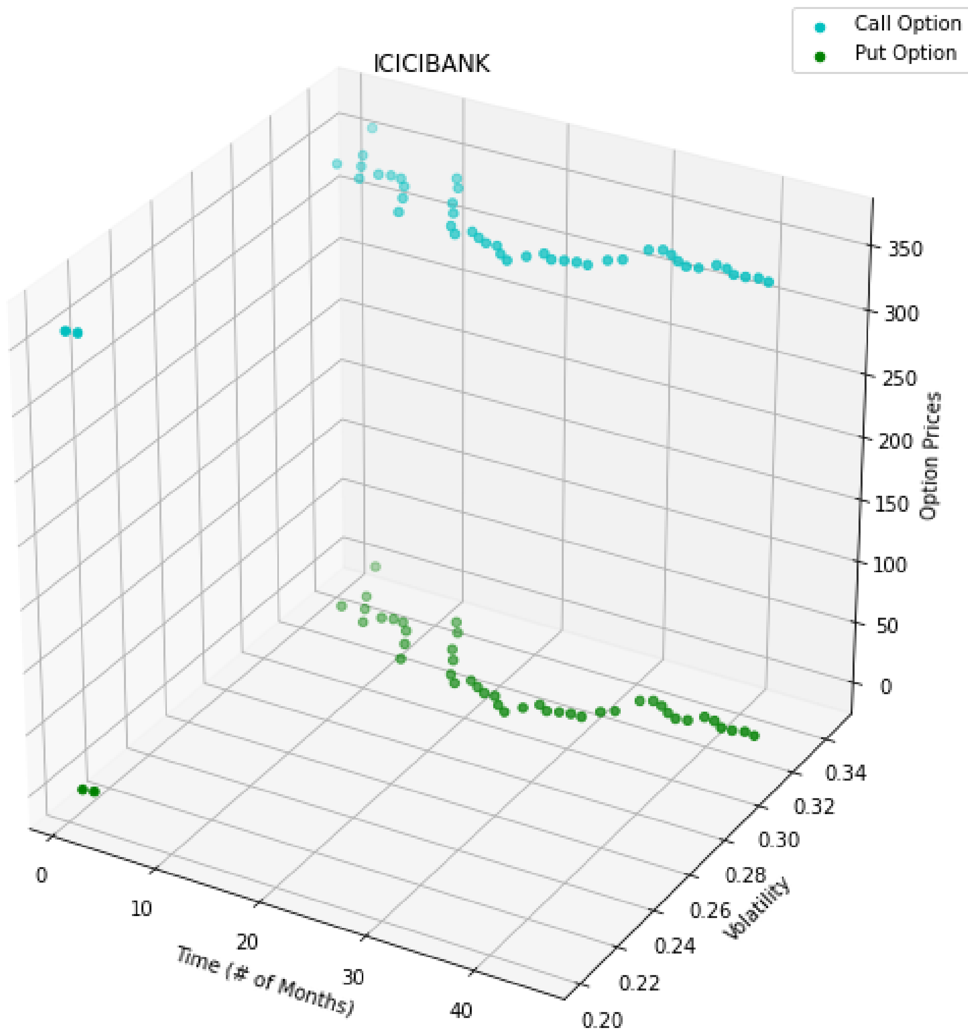
Part A

Historical Volatility of last one month's data = 0.20221

Part B

Call Prices for different K values = [359.35569 359.67352 358.98422 359.934]

Put Prices for different K values= [0.01676 0.00406 0.04193 0.00011]

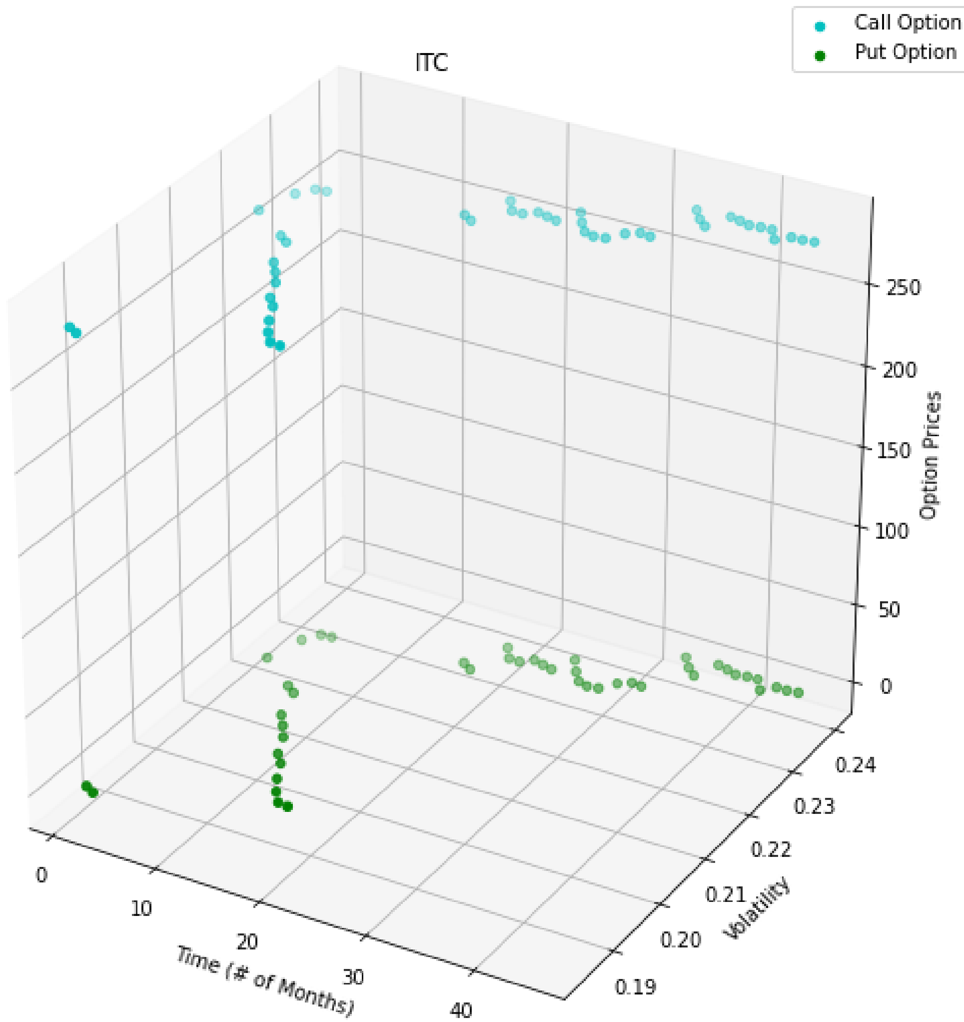


Stock : ITC   Market : BSE

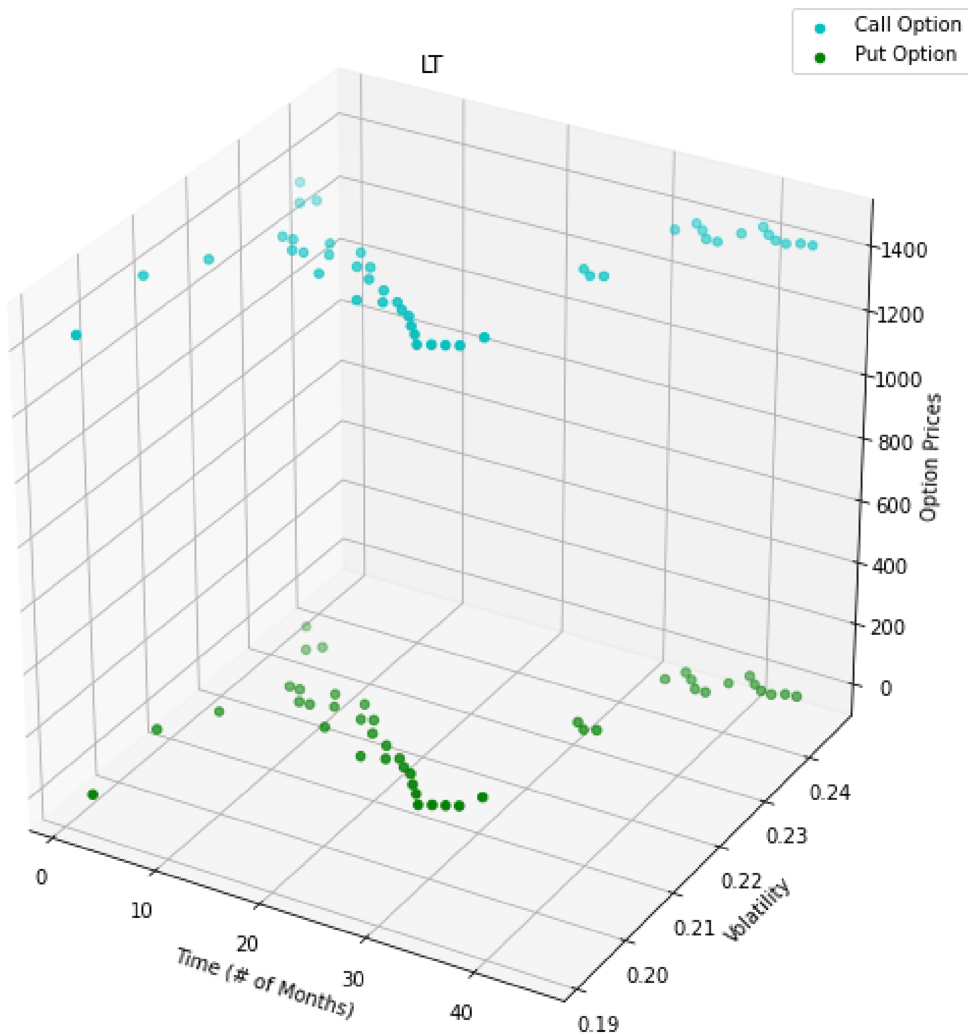
Part A

Historical Volatility of last one month's data = 0.18462

```
Part B
Call Prices for different K values = [281.13801 281.39245 280.83707 281.59829]
Put Prices for different K values= [5.210e-03 1.050e-03 1.459e-02 2.000e-05]
```




```
--------------------------------------------------------------------------------

                Stock : LT      Market : BSE
Part A
Historical Volatility of last one month's data = 0.2056
Part B
Call Prices for different K values = [1435.93645 1437.19868 1434.46509
1438.23642]
Put Prices for different K values= [0.07797 0.01944 0.19153 0.00057]
```



Stock : RELIANCE Market : BSE

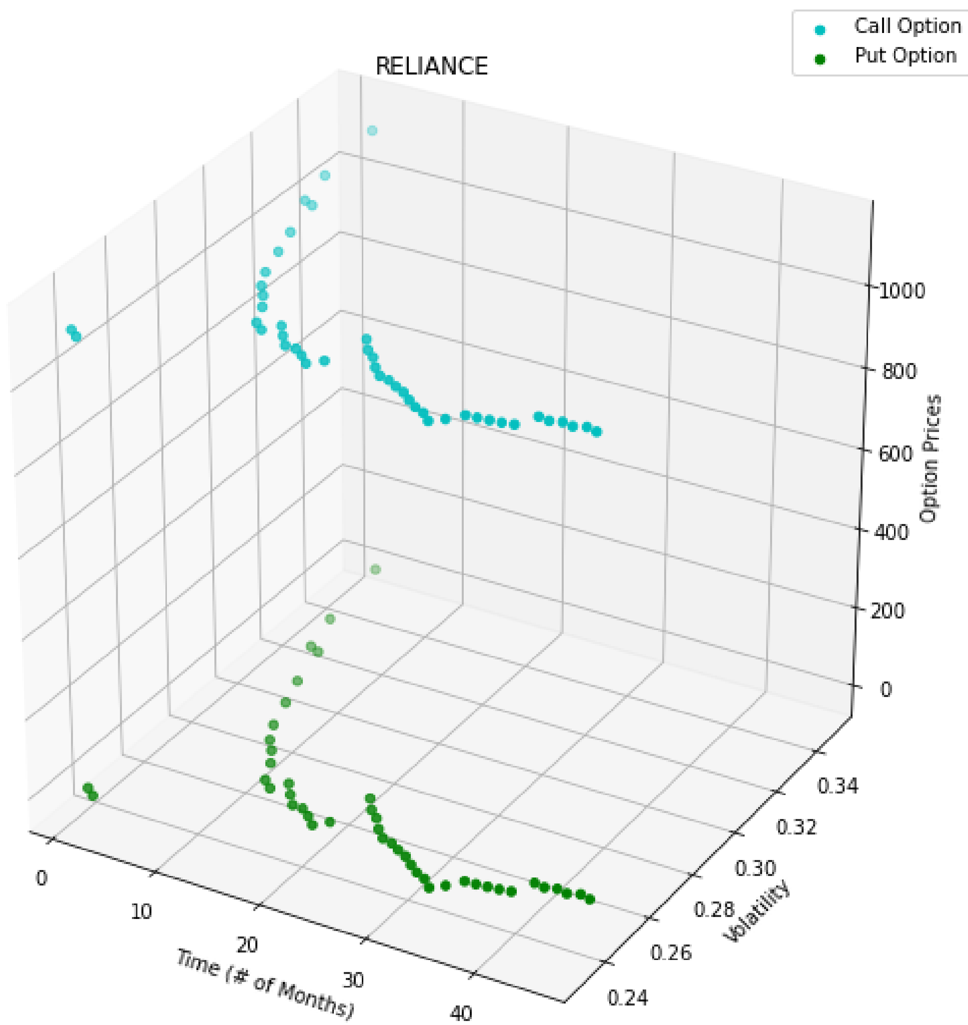
Part A

Historical Volatility of last one month's data = 0.23301

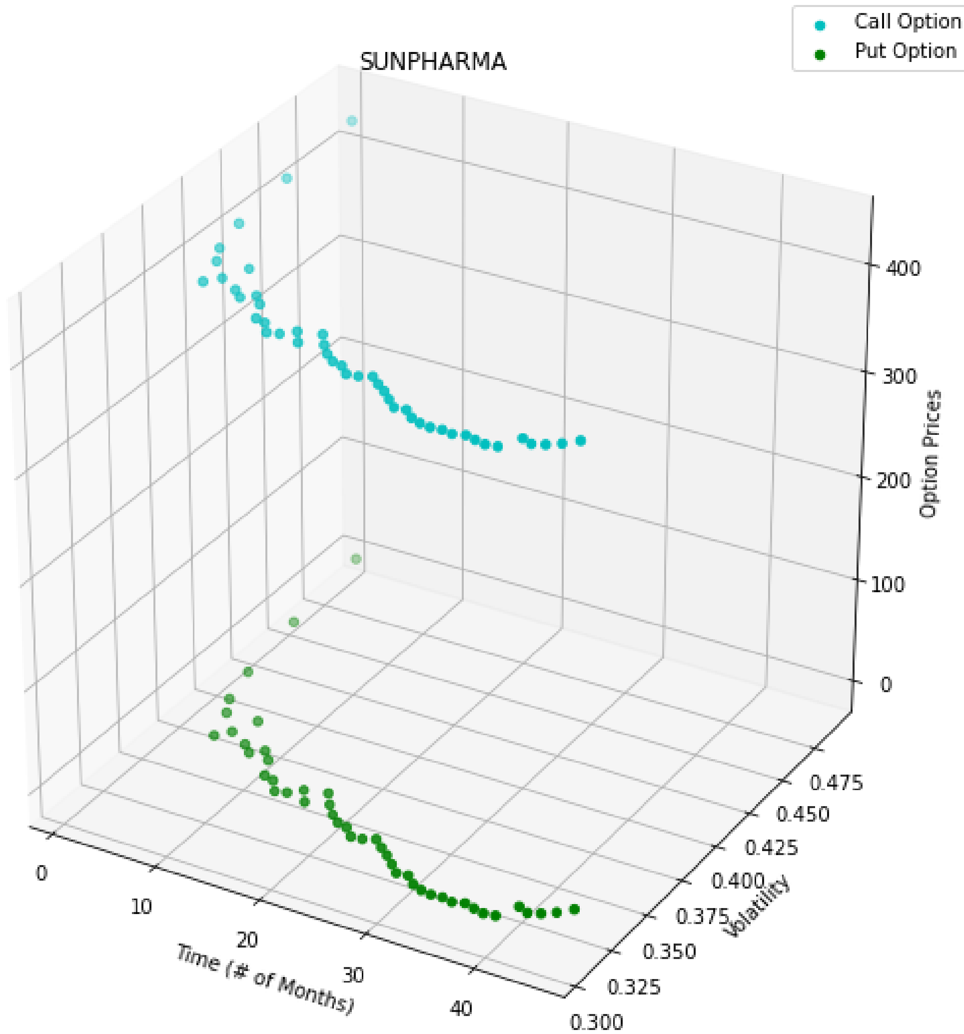
Part B

Call Prices for different K values = [1119.15708 1120.07086 1118.11707 1120.84668]

Put Prices for different K values= [0.16562 0.05011 0.36077 0.00249]




```
--------------------------------------------------------------------------------

                Stock : SUNPHARMA       Market : BSE
Part A
Historical Volatility of last one month's data = 0.49064
Part B
Call Prices for different K values = [430.58659 430.6104  430.56338 430.63734]
Put Prices for different K values= [0.7274  0.35581 1.17867 0.06643]
```



Stock : TATAMOTORS   Market : BSE

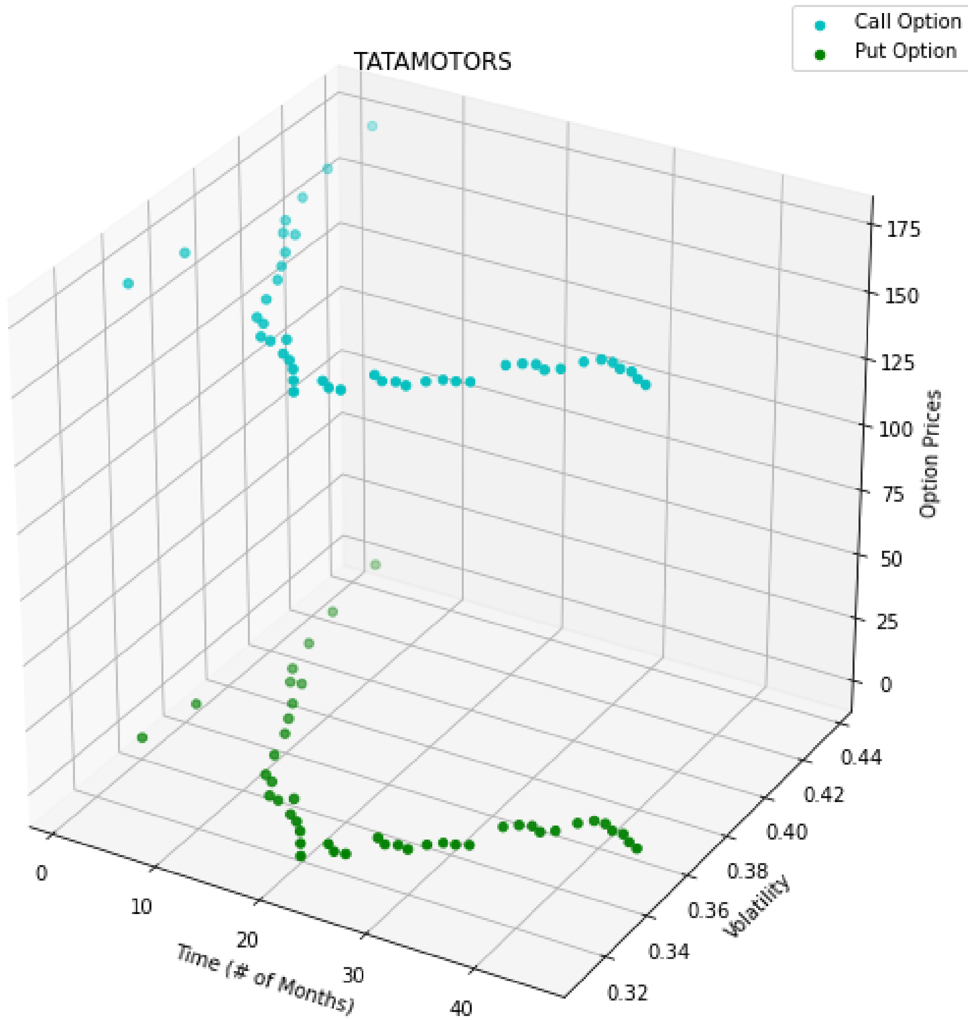
Part A

Historical Volatility of last one month's data = 0.33629

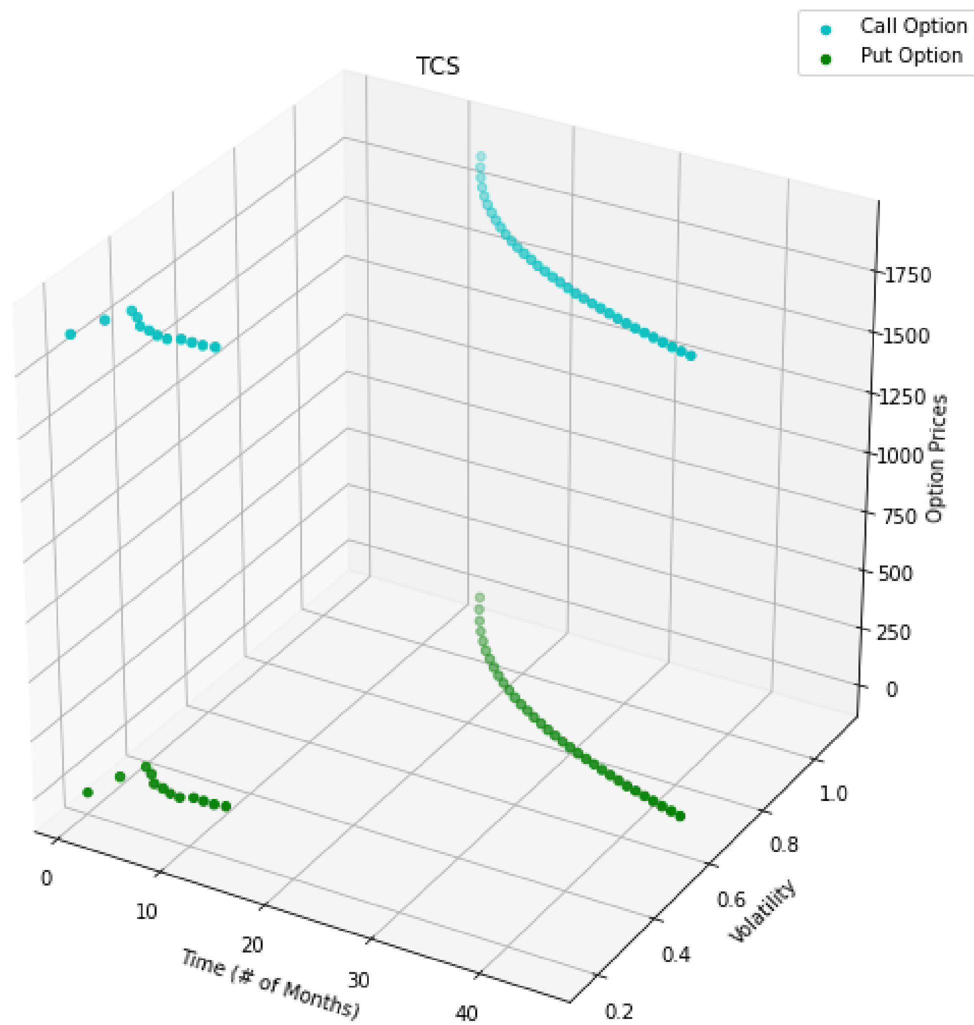
Part B

Call Prices for different K values = [172.43649 172.50709 172.36277 172.57666]

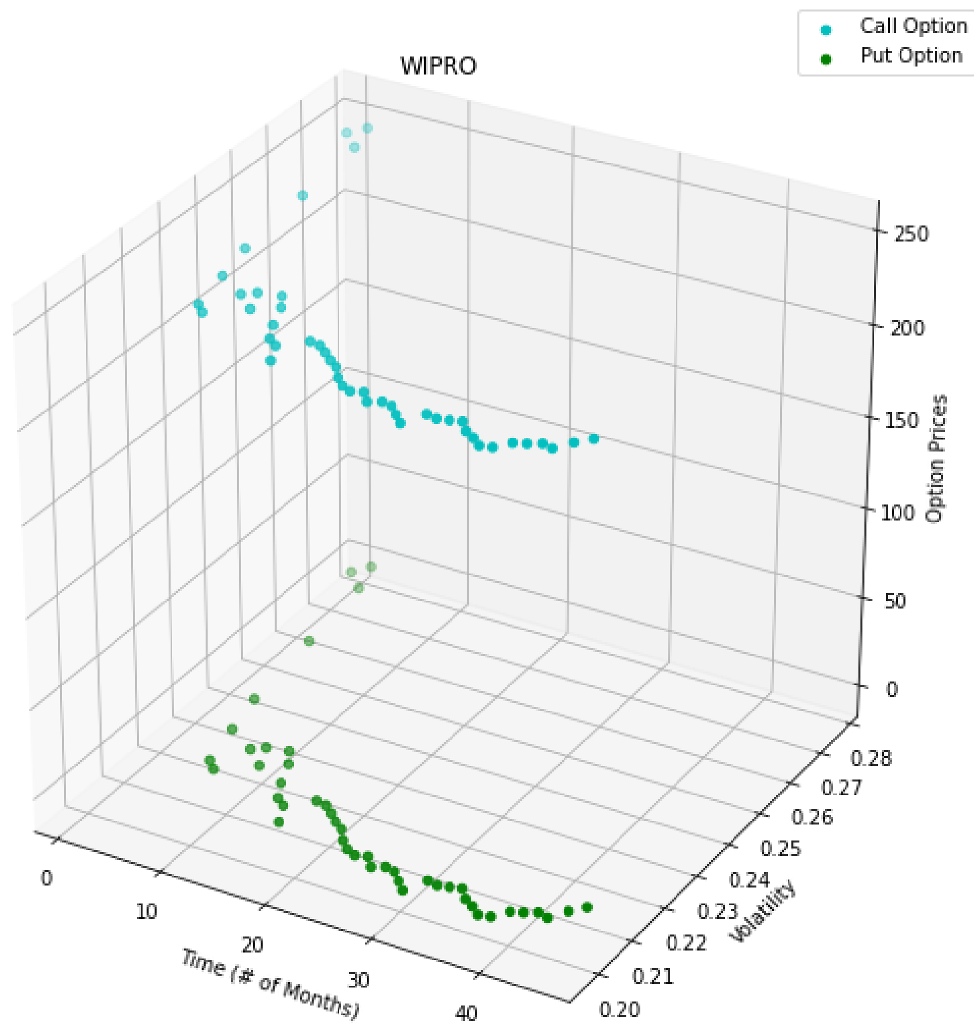
Put Prices for different K values= [0.15343 0.06556 0.26988 0.00835]



```
                Stock : TCS     Market : BSE
Part A
Historical Volatility of last one month's data = 0.17299
Part B
Call Prices for different K values = [1890.08928 1891.81433 1888.03692
1893.20237]
Put Prices for different K values= [1.636e-02 2.840e-03 5.029e-02 3.000e-05]
```

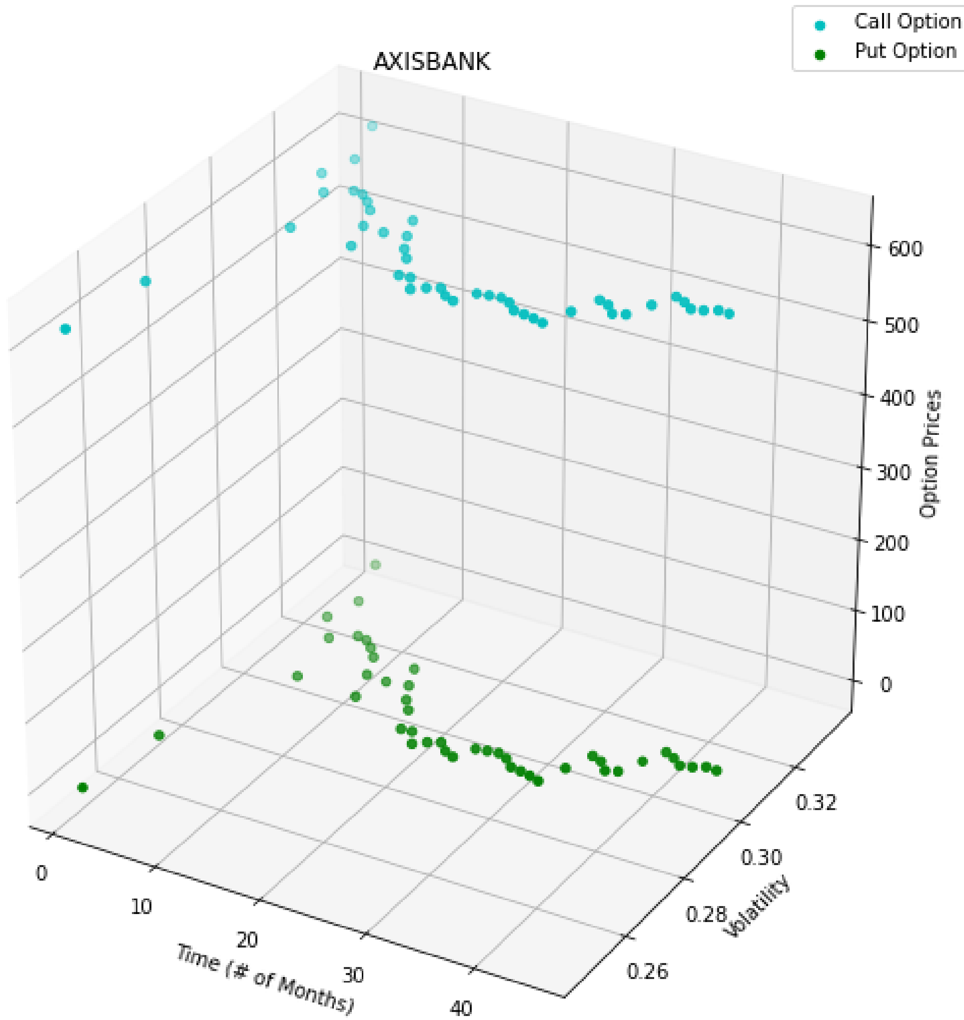


```
                Stock : WIPRO   Market : BSE
Part A
Historical Volatility of last one month's data = 0.27367
Part B
Call Prices for different K values = [247.32968 247.49574 247.14762 247.64541]
Put Prices for different K values= [0.0965  0.03515 0.18735 0.00289]
```

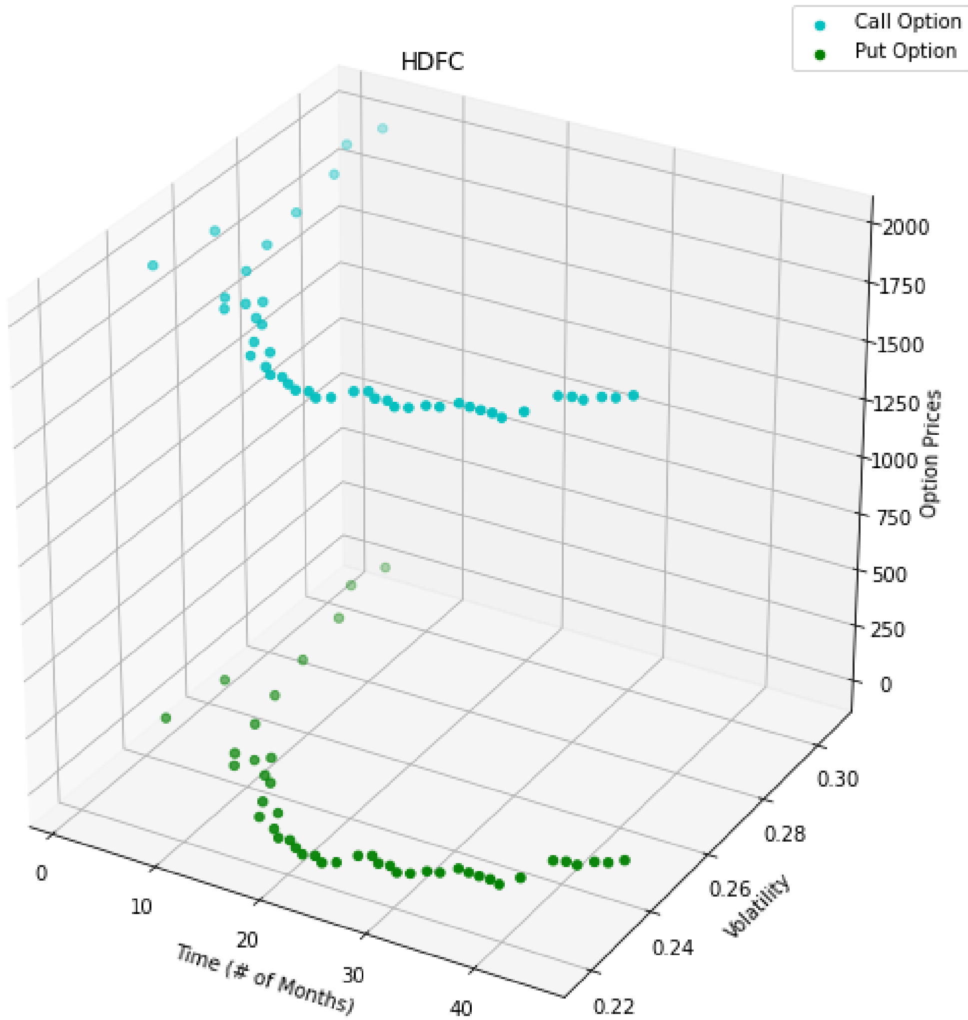


###

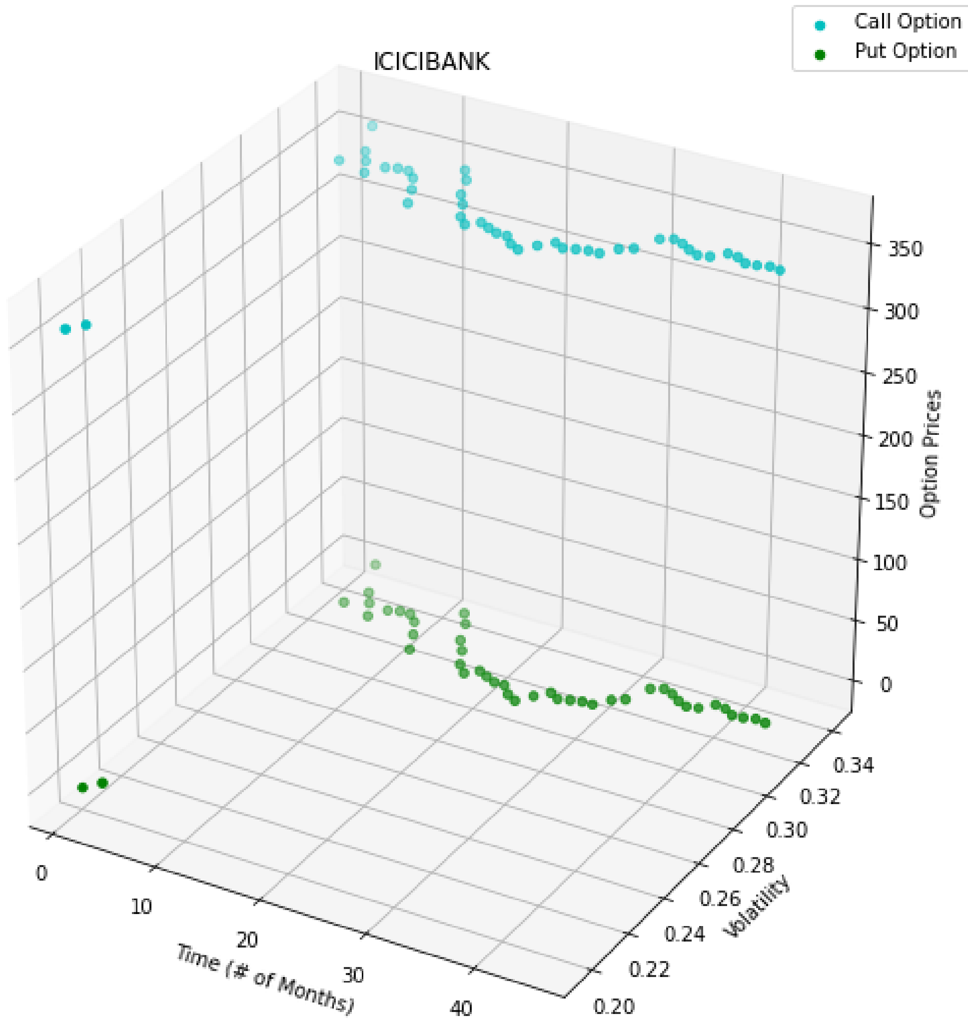
```
                Stock : AXISBANK        Market : NSE
Part A
Historical Volatility of last one month's data = 0.24613
Part B
Call Prices for different K values = [618.8939  619.37377 618.35437 619.78877]
Put Prices for different K values= [0.1322  0.04291 0.27566 0.00258]
```



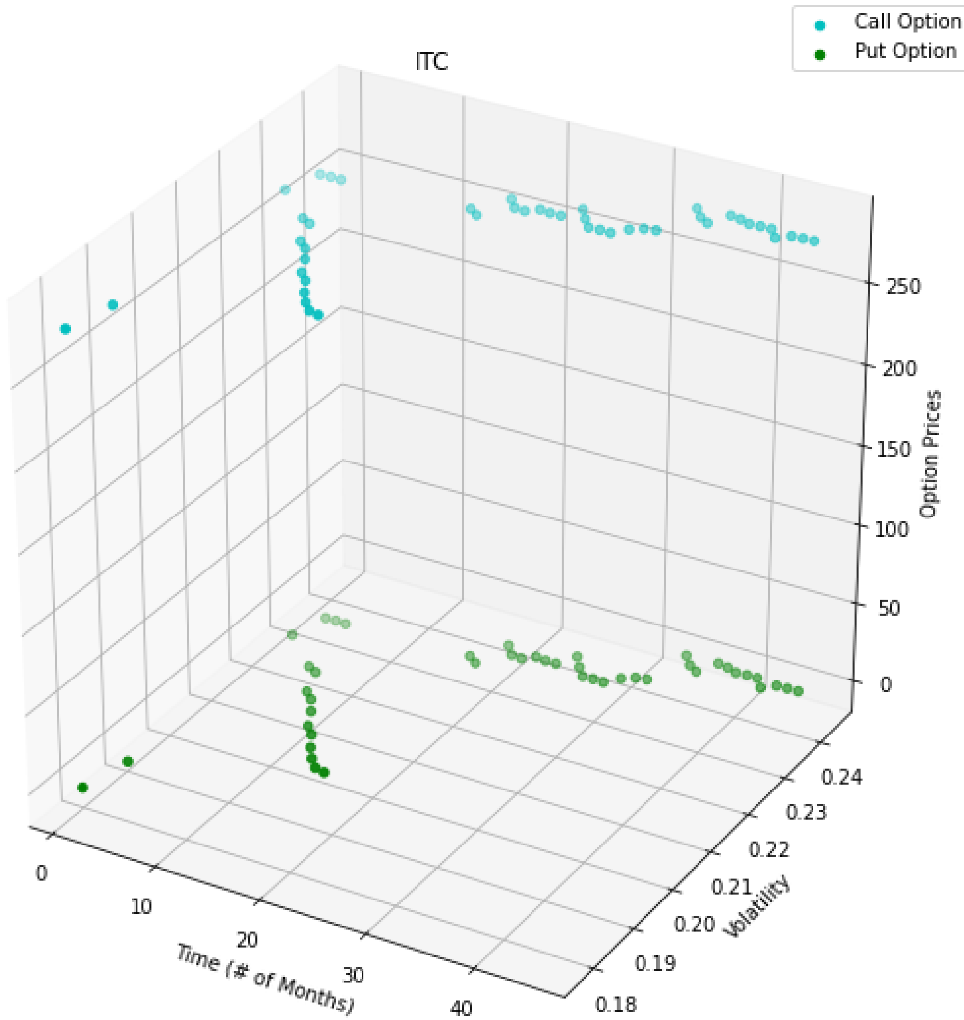
```
                Stock : HDFC    Market : NSE
Part A
Historical Volatility of last one month's data = 0.24345
Part B
Call Prices for different K values = [1965.12681 1966.66805 1963.38962 1967.9958
]
Put Prices for different K values= [0.39132 0.12532 0.82283 0.00727]
```



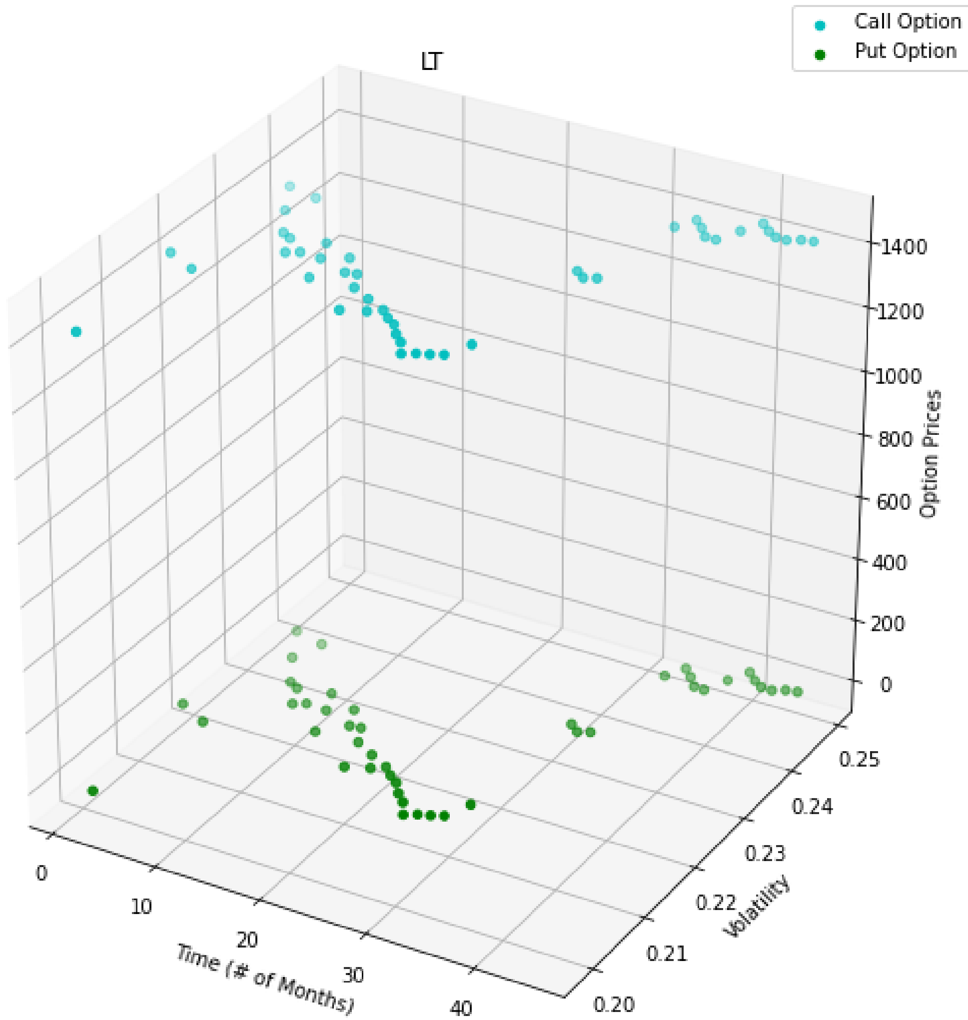

```
--------------------------------------------------------------------------------

                Stock : ICICIBANK       Market : NSE
Part A
Historical Volatility of last one month's data = 0.19574
Part B
Call Prices for different K values = [359.50092 359.82212 359.12373 360.08392]
Put Prices for different K values= [1.227e-02 2.800e-03 3.189e-02 6.000e-05]
```



```
                Stock : ITC     Market : NSE
Part A
Historical Volatility of last one month's data = 0.17765
Part B
Call Prices for different K values = [281.13616 281.39202 280.8324  281.59828]
Put Prices for different K values= [3.36e-03 6.20e-04 9.92e-03 1.00e-05]
```



```
                Stock : LT      Market : NSE
Part A
Historical Volatility of last one month's data = 0.21623
Part B
Call Prices for different K values = [1435.03043 1436.26274 1433.60659
1437.28727]
Put Prices for different K values= [0.12016 0.03258 0.28019 0.0012 ]
```



                Stock : RELIANCE   Market : NSE

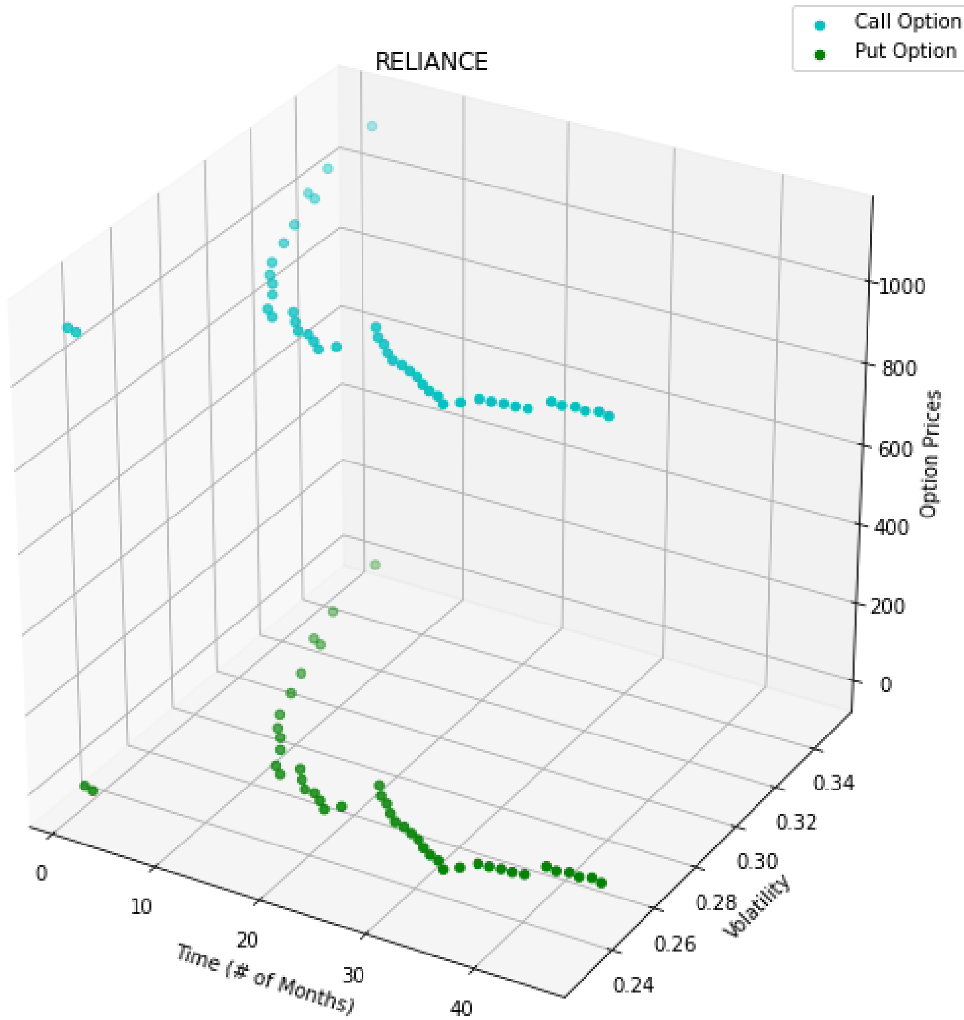
Part A

Historical Volatility of last one month's data = 0.22796

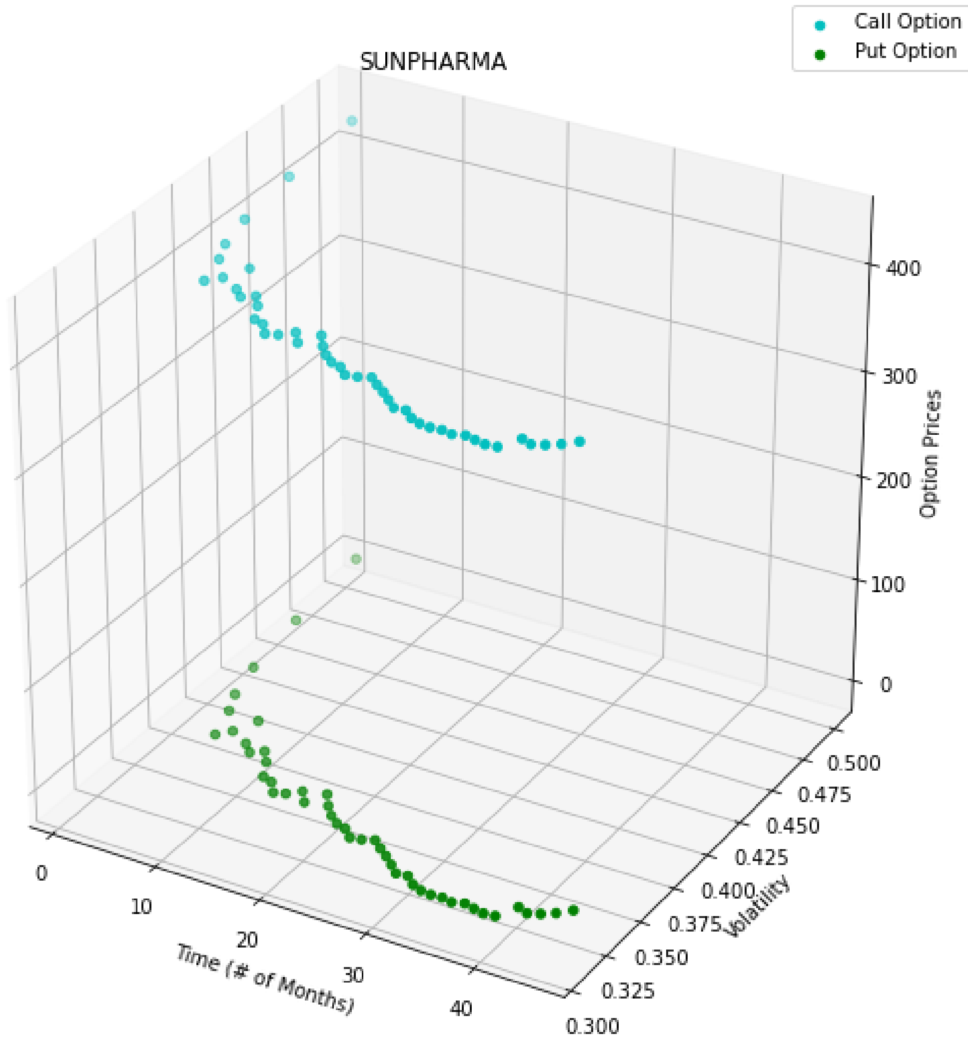
Part B

Call Prices for different K values = [1119.33242 1120.26201 1118.26951 1121.046
]

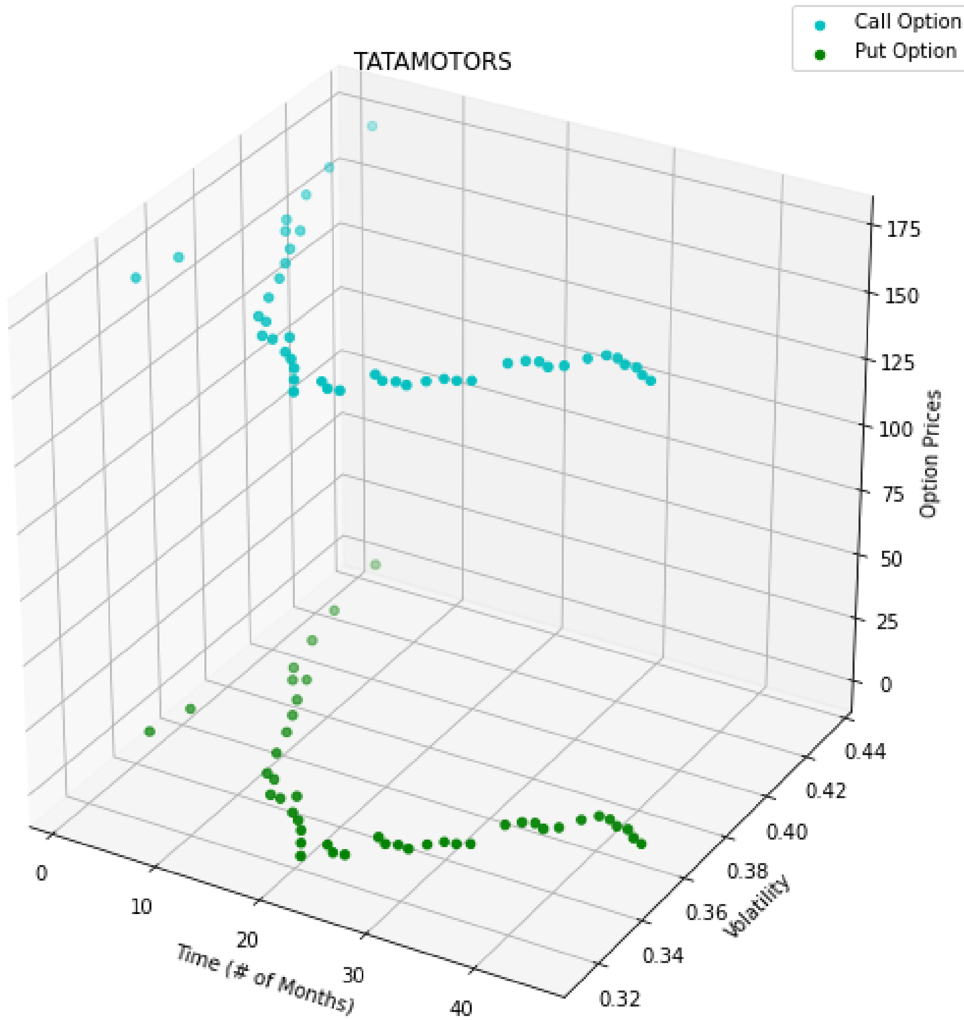
Put Prices for different K values= [0.14138 0.04149 0.31384 0.0019]



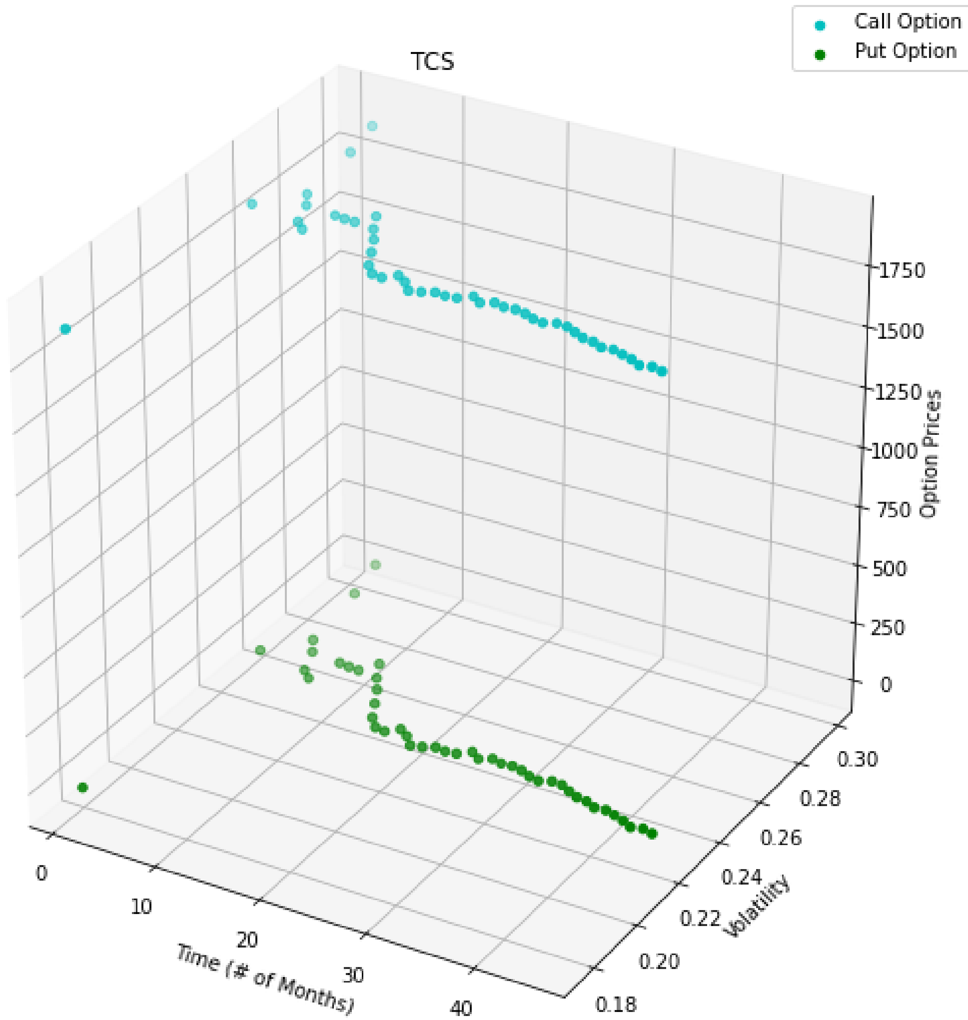
```
                Stock : SUNPHARMA       Market : NSE
Part A
Historical Volatility of last one month's data = 0.50032
Part B
Call Prices for different K values = [430.44544 430.46579 430.42564 430.48895]
Put Prices for different K values= [0.73597 0.36105 1.19049 0.068  ]
```



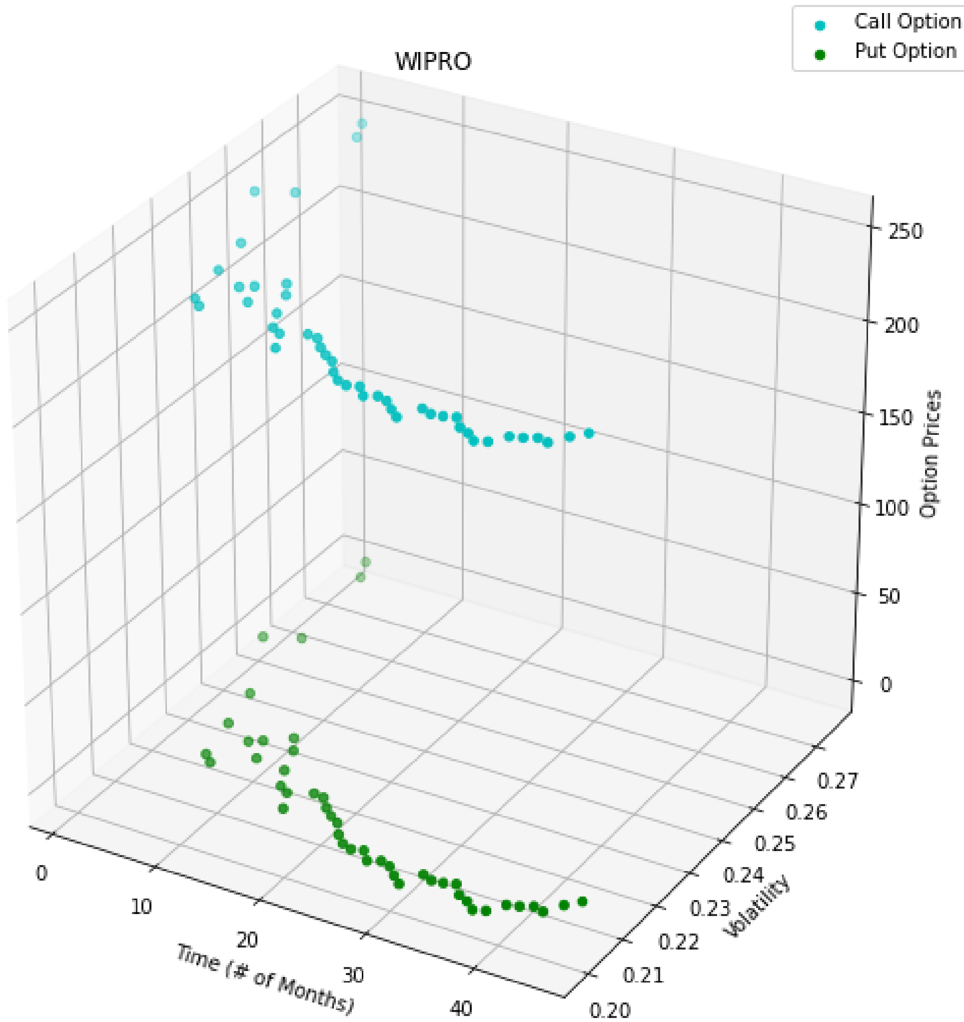
```
                Stock : TATAMOTORS      Market : NSE
Part A
Historical Volatility of last one month's data = 0.34187
Part B
Call Prices for different K values = [172.54407 172.61098 172.47445 172.67738]
Put Prices for different K values= [0.1612  0.06955 0.28187 0.0091 ]
```




```
--------------------------------------------------------------------------------

                Stock : TCS     Market : NSE
Part A
Historical Volatility of last one month's data = 0.17549
Part B
Call Prices for different K values = [1889.59334 1891.31545 1887.54676
1892.70247]
Put Prices for different K values= [1.951e-02 3.510e-03 5.866e-02 4.000e-05]
```



```
                Stock : WIPRO   Market : NSE
Part A
Historical Volatility of last one month's data = 0.24867
Part B
Call Prices for different K values = [247.73777 247.92771 247.52473 248.09258]
Put Prices for different K values= [0.05644 0.01854 0.11679 0.00115]
```


WIPRO
Call Option
Put Option
Option Prices
0
50
100
150
200
250
Time (# of Months)
0
10
20
30
40
Volatility
0.20
0.21
0.22
0.23
0.24
0.25
0.26
0.27