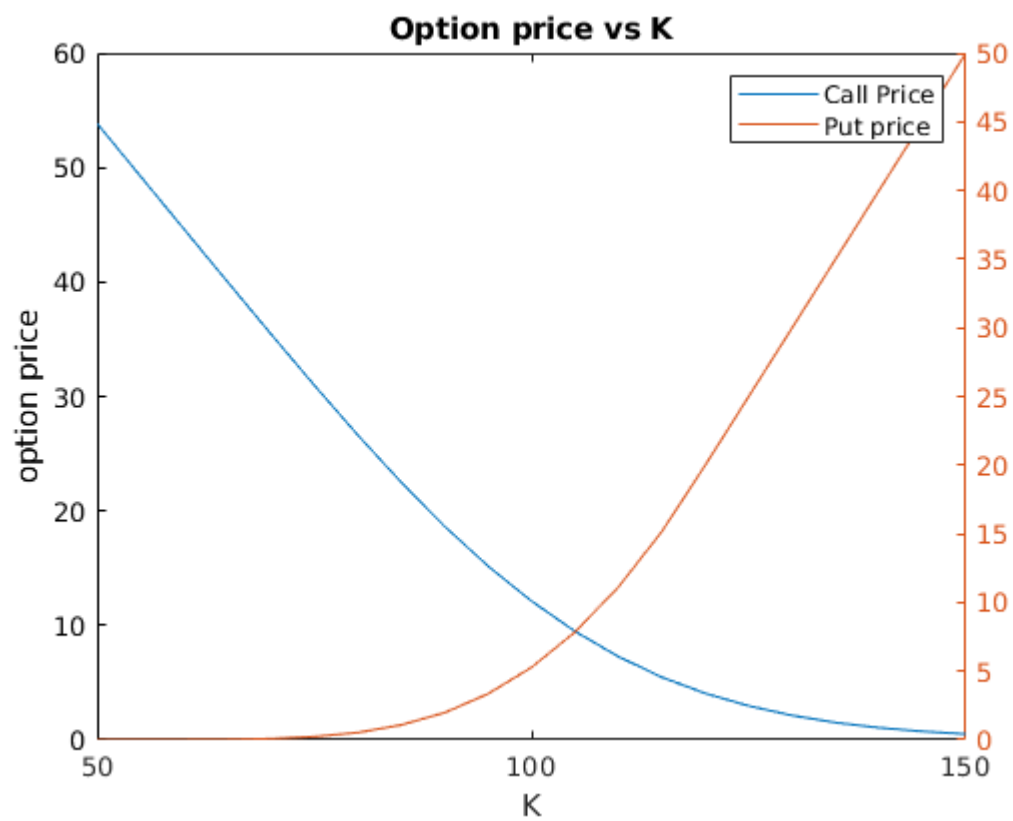
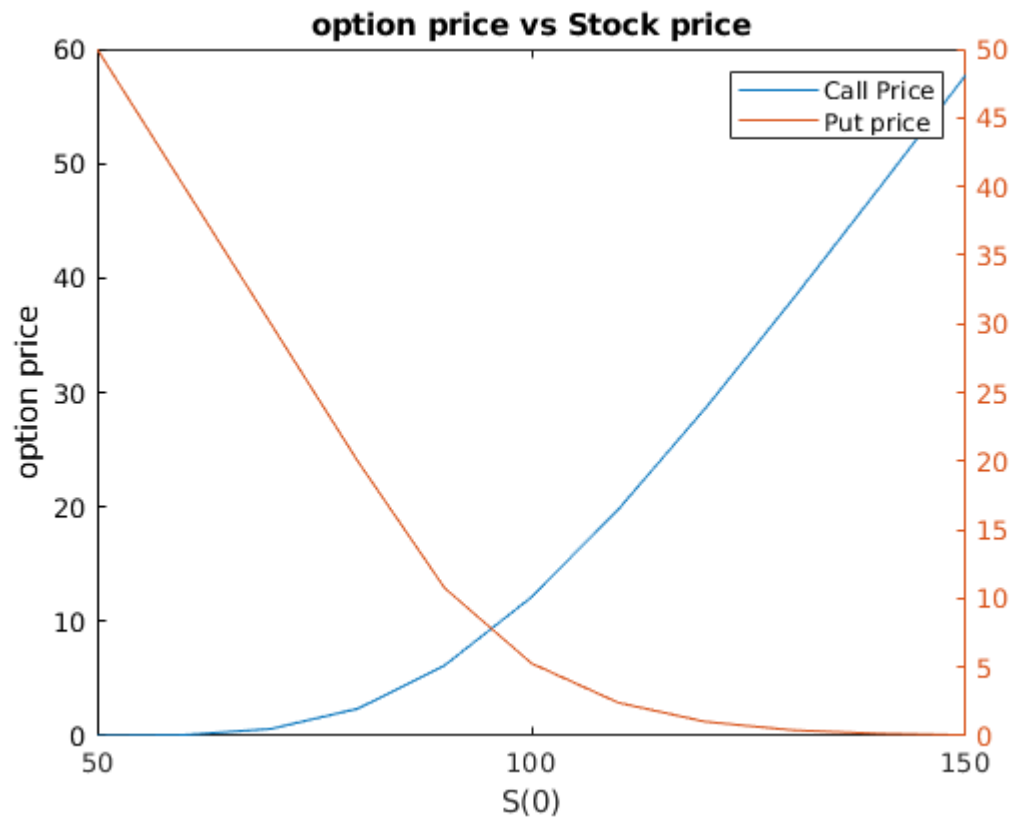
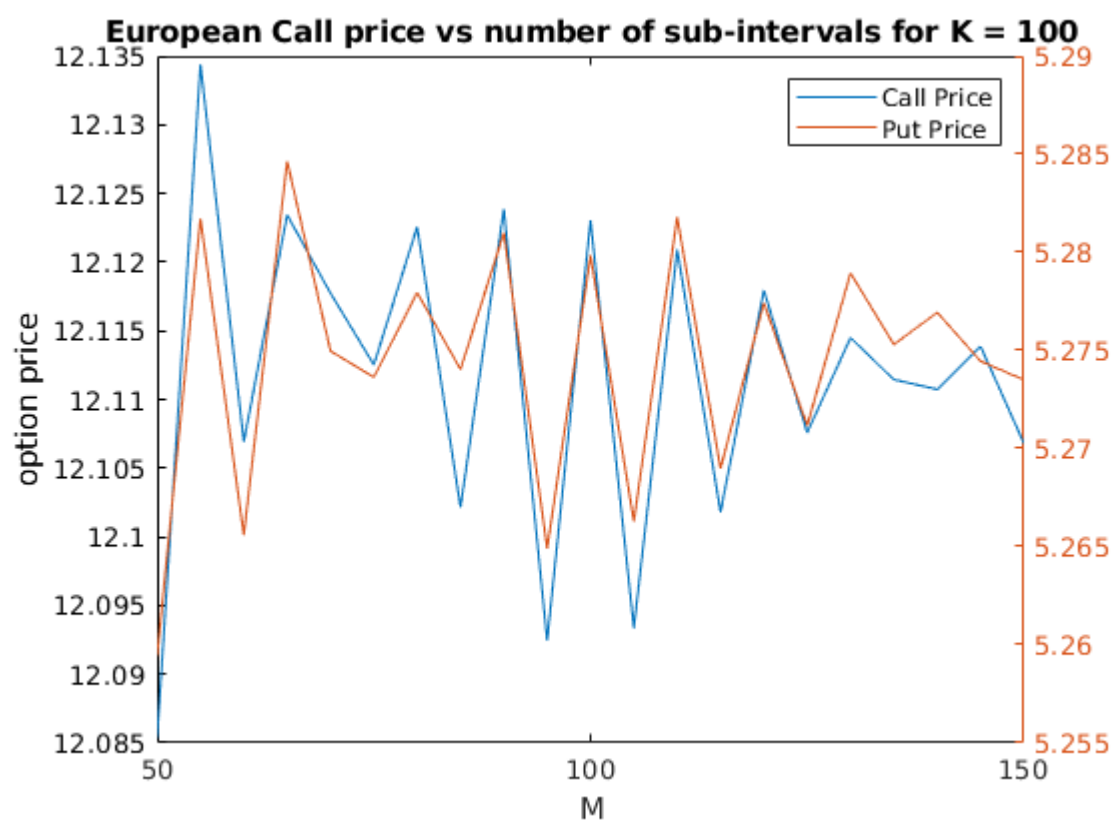
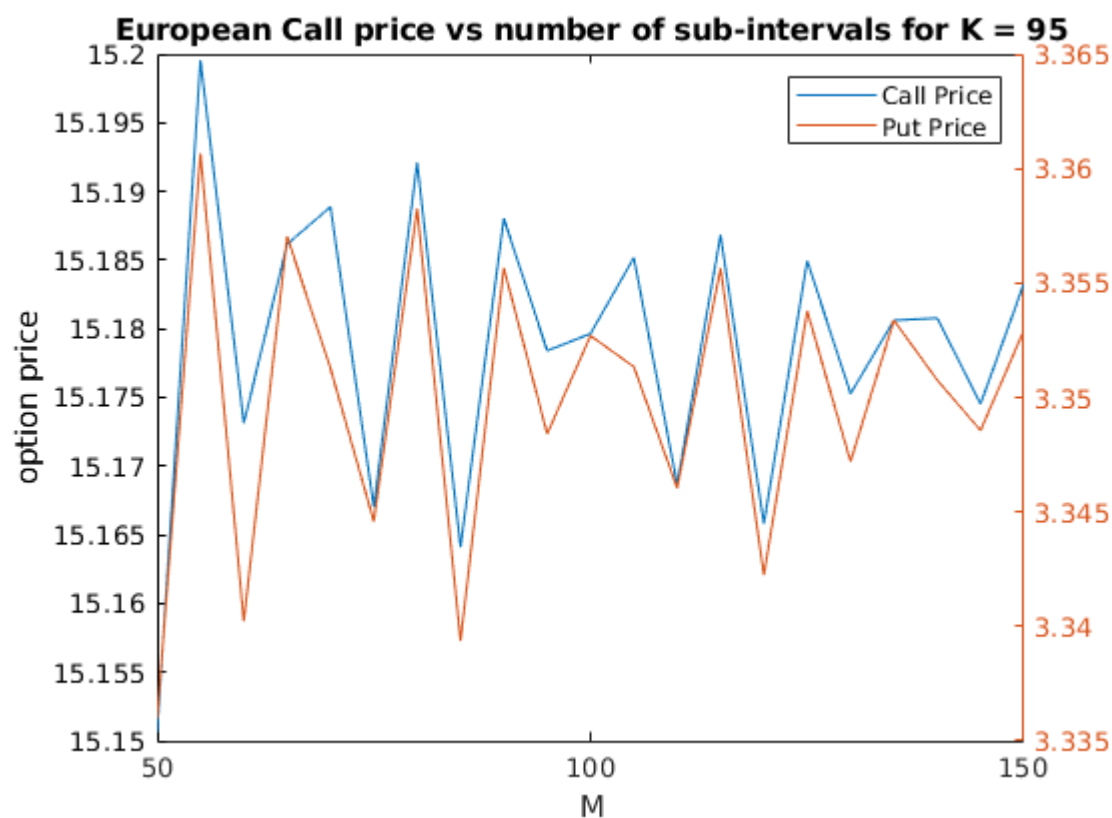
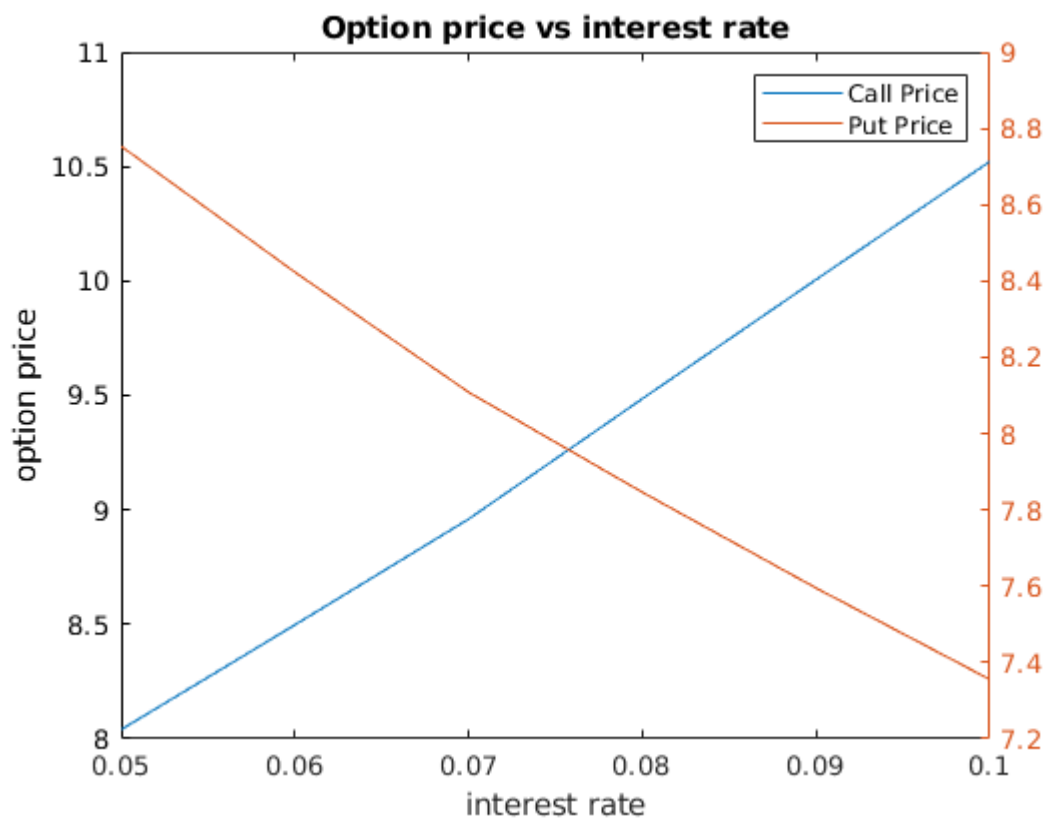
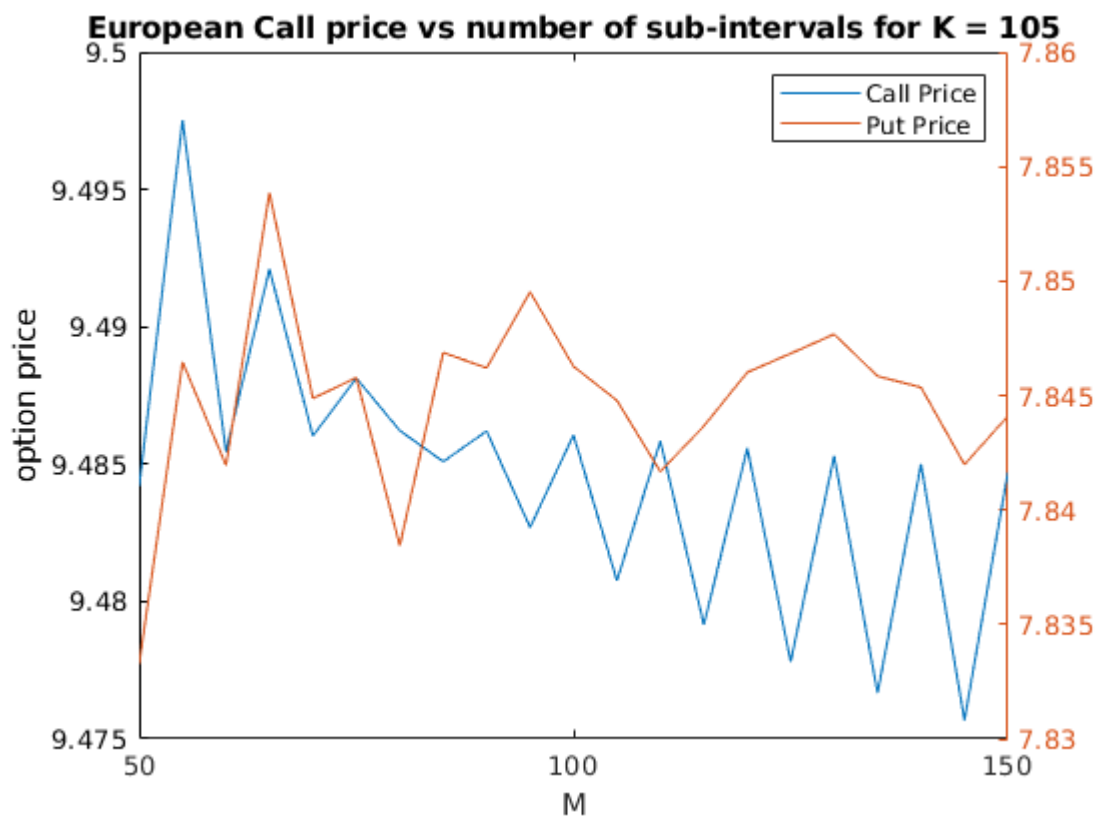


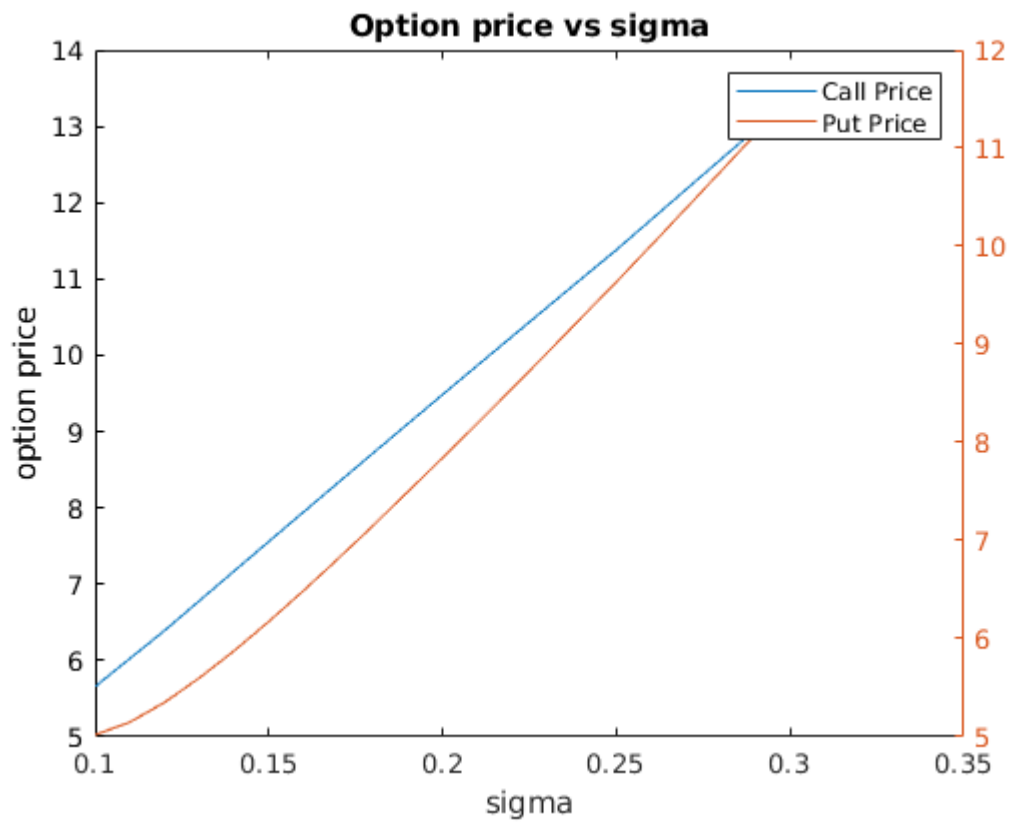
Lab 3 Output

Q1.









Q2.

M	Lookback option price
5	9.119
10	10.081
15	10.519
20	10.805

Table of Option price at each time step

table = 32x6 table

	T0	T1	T2	T3	T4	T5
1	9.1193	9.5048	12.1687	17.5821	25.0512	32.1054
2	0	9.0280	7.1479	7.1484	10.6809	18.8059
3	0	0	9.7991	8.3246	10.6809	18.8059
4	0	0	8.5481	6.2019	3.8469	2.9014
5	0	0	0	13.7129	13.0714	18.8059
6	0	0	0	6.2019	3.8469	2.9014
7	0	0	0	9.9553	8.0036	7.8184
8	0	0	0	7.4168	4.6005	0
9	0	0	0	0	21.1881	21.2350
10	0	0	0	0	6.6808	5.3304
11	0	0	0	0	8.0036	7.8184
12	0	0	0	0	4.6005	0

	T0	T1	T2	T3	T4	T5
13	0	0	0	0	15.6319	16.2664
14	0	0	0	0	4.6005	0
15	0	0	0	0	9.5714	9.3499
16	0	0	0	0	5.5016	0
17	0	0	0	0	0	29.4826
18	0	0	0	0	0	13.5780
19	0	0	0	0	0	13.5780
20	0	0	0	0	0	0
21	0	0	0	0	0	16.2664
22	0	0	0	0	0	0
23	0	0	0	0	0	9.3499
24	0	0	0	0	0	0
25	0	0	0	0	0	25.3946
26	0	0	0	0	0	6.3745
27	0	0	0	0	0	9.3499
28	0	0	0	0	0	0
29	0	0	0	0	0	19.4527
30	0	0	0	0	0	0
31	0	0	0	0	0	11.1814
32	0	0	0	0	0	0

Q3.

```

M = 5 : 9.06572
Time taken by function: 487 microseconds
M = 10 : 10.0341
Time taken by function: 2507 microseconds
M = 25 : 10.2972
Time taken by function: 89917 microseconds
M = 50 : 10.5368
Time taken by function: 1383561 microseconds

```

Q4.

Value of M	Intial European call price
1	13.714
5	12.163
10	12.277
20	12.175
50	12.085
100	12.123
200	12.104
400	12.101

Elapsed time is 0.094152 seconds.