w	Iteration	Time[sec]
0.100	9668	0.397302
0.200	4931	0.188407
0.300	3191	0.119139
0.400	2267	0.089969
0.500	1685	0.063040
0.600	1283	0.048021
0.700	984	0.036855
0.800	753	0.028300
0.900	567	0.021368
1.000	413	0.015536
1.100	283	0.010716
1.200	171	0.006466
1.300	83	0.003198
1.400	2564	0.095974
1.500	566	0.021152
1.600	334	0.012560
1.700	232	0.009338
1.800	170	0.007004
1.900	121	0.005359
2.000	61	0.002851

Table 2- Different values of relaxation parameter (w) for Line SOR

A similar observation can be said for the Line SOR case: at **w = 1.3**, the solution converges the fastest (at 83 iterations and 0.003198 seconds). It can also be seen from later plots of relaxation parameter vs. iteration numbers, that anything higher than the optimum value will not guarantee convergence. As a result, w = 1.3 is chosen as the optimal value for Line SOR.