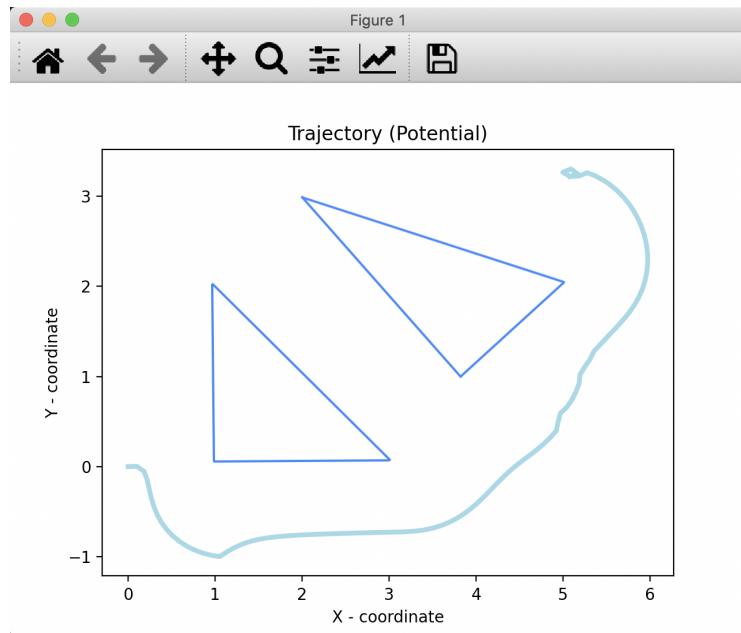


SC627 Assignment 2 Report

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In this code I have exactly followed the steps as given in the slides. The path obtained is as follows:



	0	1
815	5.08253	3.26917
816	5.00494	3.20608
817	5.07115	3.28102
818	5.16708	3.30927
819	5.09612	3.23881
820	5.15164	3.32198
821	5.088	3.24484
822	4.9899	3.22544
823	5.00278	3.32461
824	5.00093	3.22462
825	5.07432	3.29255
826	5.174	3.28464
827	5.0927	3.22642

The trajectory converges to (5.0927, 3.22642). We note that exact convergence is not to be expected since the goal point is not the minima of our combined potential function. At the goal, the repulsive potential also exists. We note that in the last few iterations, the object moves

around in a small space around the minima. This may be due to the smaller values of gradient close to the minima. The value obtained at the end is not the minima either since the condition used in the code only requires the gradient norm to be less than 0.01.