

تمرین سری چهارم الگوریتم‌های مدرن در بهینه‌سازی

علی بنی‌اسد

۲۲ دی ۱۴۰۱

۱ سوال اول

Table 1: Values Achieved with PSO algorithm for Problems 1 and 2 (D=10)

FES/Problem		Problem 1	Problem 2
1e3	1 th (Best)	-449.9999787052277	-449.9999999999955
	7 th	-449.999853416358	-449.9999999983805
	13 th (Median)	-449.9996680779018	-449.999985766405
	19 th	-449.9992664160519	-449.8254439788584
	25 th (Worst)	-449.9935680412684	-61.45240223709476
	Mean	-449.9992093850963	-423.450611298781
	Std	0.001321429062858954	81.2593245611484

Table 2: Values Achieved with PSO algorithm for Problems 1 and 2 (D=30)

FES/Problem		Problem 1	Problem 2
1e3	1 th (Best)	-449.99998619166854	-449.99999999939354
	7 th	-449.9998718525022	40420.10955750148
	13 th (Median)	-449.9998195592621	56691.59162357271
	19 th	-449.99942177358423	79561.30101108812
	25 th (Worst)	-449.9985720932928	123160.65222491047
	Mean	-449.99962402843727	58183.77085117807
	Std	0.0003711894716529072	30723.13488958691

Table 3: Values Achieved with PSO algorithm for Problems 1 and 2 (D=50)

FES/Problem		Problem 1	Problem 2
1e3	1 th (Best)	-449.99998100894874	18439.04388319432
	7 th	-449.9999238343942	44613.926387444895
	13 th (Median)	-449.9998536654368	69394.46049754831
	19 th	-449.9996903867559	96414.65498879585
	25 th (Worst)	-449.99863762582254	153348.96108922383
	Mean	-449.99973406754907	69754.01098699088
	Std	0.0003002225766163943	37537.44745190397