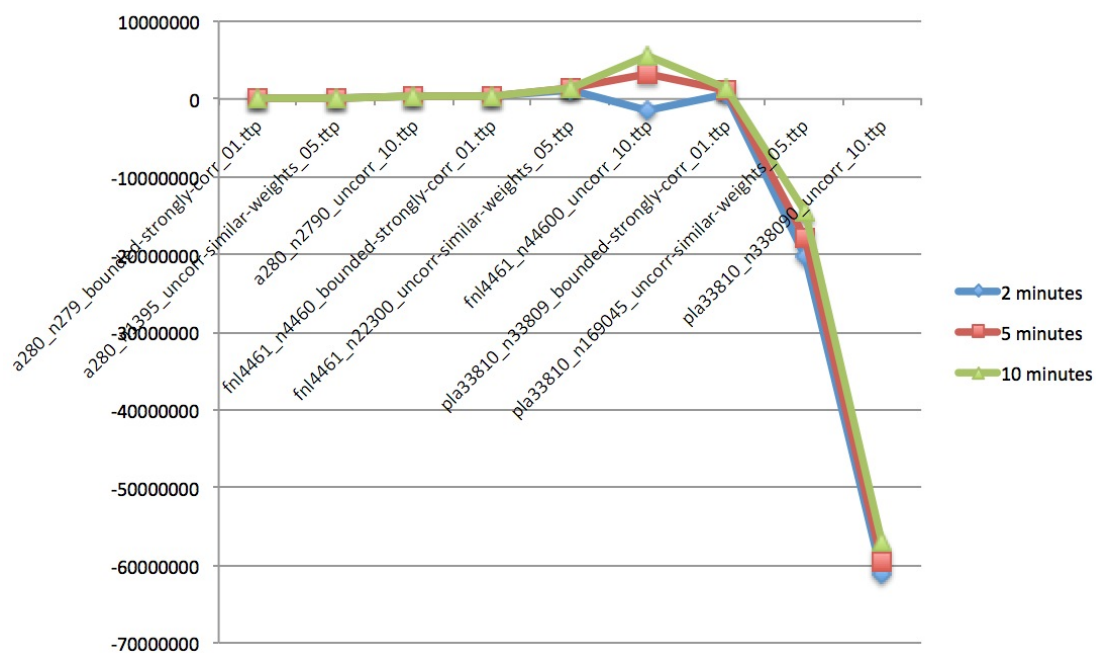


In exercise 5, we take the best-performing algorithms from each of the exercises 2, 3, and 4, and test the algorithm on the nine instances. We run ten times in each instance for each exercise. Each testing can generate a corresponding log file which storing the results. Finally, we select the best result from the log file and put into the result table as well as its corresponding line chart.

## Exercise 2

The best-performing algorithm that we chose from exercise 2 is Local operations on permutations (LS-P).

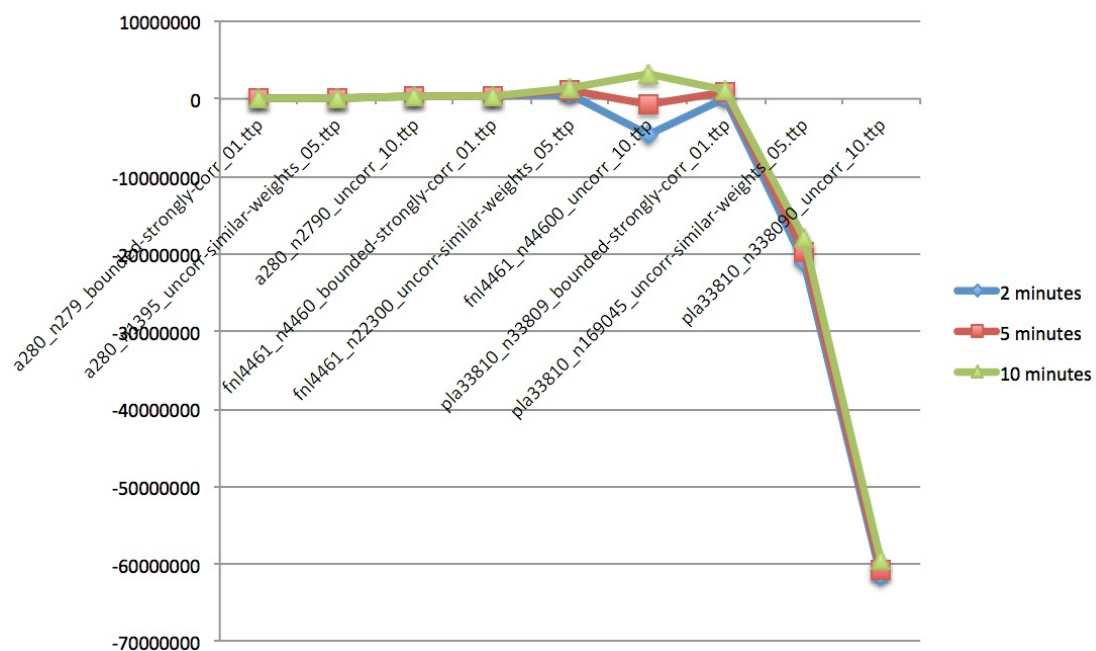
	2 minutes	5 minutes	10 minutes
a280_n279_bounded-strongly-corr_01.ttp	17990.88253	18069.5937	18024.72311
a280_n1395_uncorr-similar-weights_05.ttp	104477.8025	103420.13	103974.4129
a280_n2790_uncorr_10.ttp	409427.6541	409432.0403	409302.2957
fnl4461_n4460_bounded-strongly-corr_01.ttp	240524.079	247105.1596	250807.8963
fnl4461_n22300_uncorr-similar-weights_05.ttp	1125075.995	1398600.587	1483444.161
fnl4461_n44600_uncorr_10.ttp	-1500560.751	3105736.33	5636819.104
pla33810_n33809_bounded-strongly-corr_01.ttp	680811.2198	1179408.792	1397478.135
pla33810_n169045_uncorr-similar-weights_05.ttp	-20173584.71	-17851721.94	-14439261.62
pla33810_n338090_uncorr_10.ttp	-61116724.15	-59551809.93	-57002847.11



### Exercise 3

The best-performing algorithm that we chose from exercise 2 is Optimization  
Local Search (OLS).

	2 minutes	5 minutes	10 minutes
a280_n279_bounded-strongly-corr_01.ttp	18049.05477	18068.44383	18069.5937
a280_n1395_uncorr-similar-weights_05.ttp	103625.1478	103797.6593	103981.0971
a280_n2790_uncorr_10.ttp	421407.6394	425386.011	425304.0749
fnl4461_n4460_bounded-strongly-corr_01.ttp	229714.0531	240641.5201	246406.3439
fnl4461_n22300_uncorr-similar-weights_05.ttp	598462.3728	1183925.038	1396116.933
fnl4461_n44600_uncorr_10.ttp	-4558039.028	-704073.5589	3171453.404
pla33810_n33809_bounded-strongly-corr_01.ttp	183705.0229	791272.6008	1187968.634
pla33810_n169045_uncorr-similar-weights_05.ttp	-20992926.9	-19782844.62	-17822359.59
pla33810_n338090_uncorr_10.ttp	-61663749.51	-60879886.18	-59516770.45



#### Exercise 4

The best-performing algorithm that we chose from exercise 4 is Local operations on permutations (LS-P).

	2 minutes	5 minutes	10 minutes
a280_n279_bounded-strongly-corr_01. ttp	18025. 88078	17999. 14435	18071. 6342
a280_n1395_uncorr-similar-weights_05. ttp	103022. 8904	103139. 764	103872. 369
a280_n2790_uncorr_10. ttp	421261. 3555	388123. 7381	409403. 278
fnl4461_n4460_bounded-strongly-corr_01. ttp	220934. 3766	235729. 7064	250910. 954
fnl4461_n22300_uncorr-similar-weights_05. ttp	96801. 83028	1032770. 091	1283478. 81
fnl4461_n44600_uncorr_10. ttp	-5768778. 367	-2555276. 617	3636807. 32
pla33810_n33809_bounded-strongly-corr_01. ttp	-121554. 3545	558734. 9478	1087298. 86
pla33810_n169045_uncorr-similar-weights_05. ttp	-21244765. 46	-20422410. 64	-18235470
pla33810_n338090_uncorr_10. ttp	-61897504. 04	-61079886. 18	-60234719

