

Chromosome size –100

Capacity – 20;

Epoch – 50;

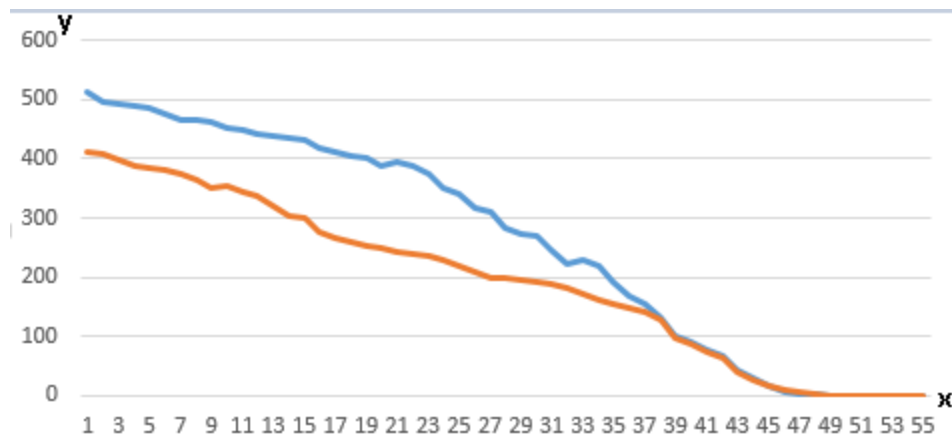
With mutation;

Onepoint crossover;

Truncle selection;

y –fitness

X - generations



Blue- original fitness

Orange – shared fitness

Start

Population	Location	Original fitness	Shared fitness
1	317,477	394	394
2	805,325	480	480
3	481,153	328	328
4	117,843	726	726
5	126,890	764	764
6	903,674	229	229
7	957,68	889	889
8	242,767	592	592

Medium

Population	Location	Original fitness	Shared fitness
1	212,477	289	333
2	701,85	344	401
3	337,753	178	232
4	219,893	212	288
5	111,30	303	397
6	601,74	129	207
7	647,68	228	283
8	342,767	113	181

Finish

Population	Location	Original fitness	Shared fitness
1	443,514	26	53
2	461,135	22	45
3	800,800	0	0
4	514,843	17	35
5	126,890	7	18
6	663,133	11	31
7	754,348	0	1
8	200,200	0	0

Best way:

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Conclusion: fitness can help us to achieve multiple using genetic algorithm.