REPORT

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Introduction

Differential Evolution: These algorithms overcome the disadvantages faced by Genetic Algorithms. Every candidate has its mutant vector with which its crossover is done and the resultant is called a trial vector. Selection of this trial vector as the next iteration of the respective candidate depends upon Elitism.

Particle Swarm Optimization: In these class of algorithms, each candidate maintains its individual identity and travels through the solution space through exchange of information

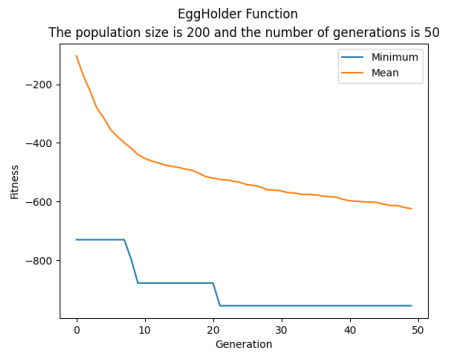
Comparision

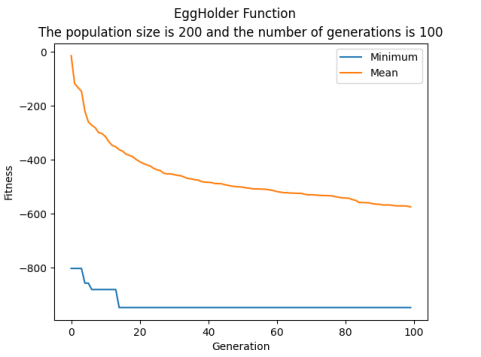
EggHolder:-959.6407	**HolderTable Function:-19.2085**

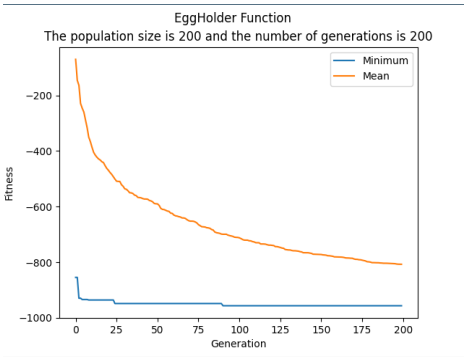
	NUMBER OF GENERATIONS					
POPULATION SIZE		**50**		**100**		**200**	
	20	**-950.7785915912339**	**-18.876418413188908**	**-955.9719448913479**	**-19.181717126338736**	**-949.96064267197**	**-19.208444634318635**
	50	**-934.0118344414061**	**-18.876418413188908**	**-956.1986589087173**	**-19.206600969670674**	**-954.9008672137268**	**-19.208444634318635**
	100	**-933.5944024372739**	**-19.16948654676573**	**-957.2417062602022**	**-19.207031927105 31**	**-952.7334280730804**	**-19.208502396150905**
	200	**-945.0461757386734**	**-19.18197446438527**	**-957.9116825606212**	**-19.208082655214888**	**-957.1791077649787**	**-19.208502396150905**

Differential Evolution

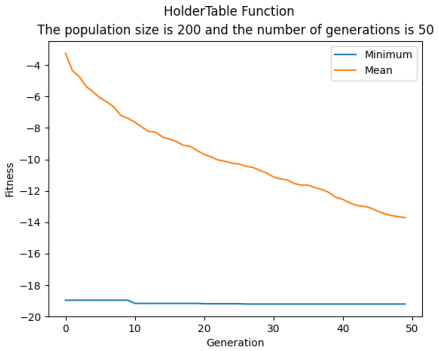
EggHolder Function with population size of 200 and 50,100 and 200 generations:

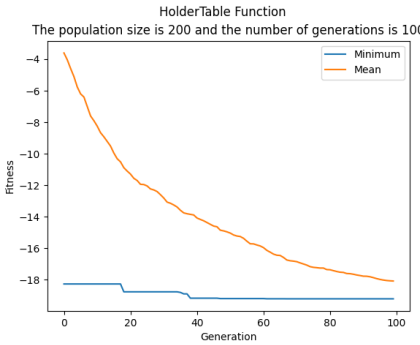


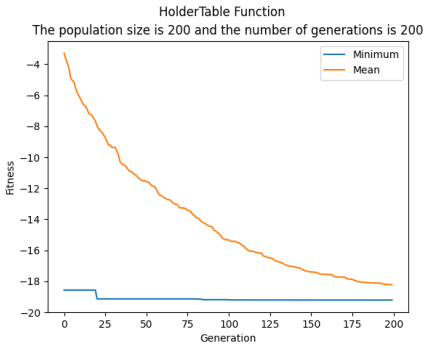




HolderTable Function with population size of 200 and 50,100 and 200 generations:

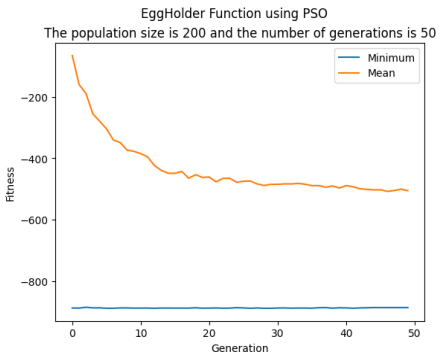


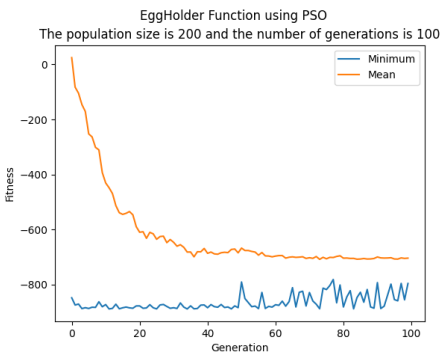


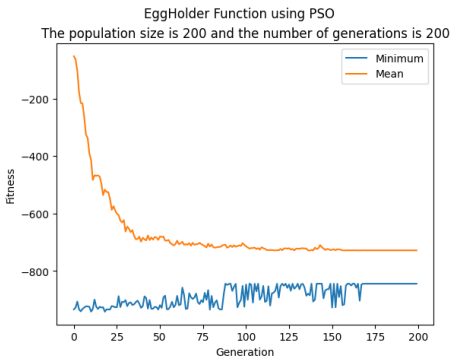


Particle Swarm Optimization:

EggHolder Function with population size of 200 and 50,100 and 200 generations:







HolderTable Function with population size of 200 and 50,100 and 200 generations: