

6.EXECUTION PROCEDURE AND TESTING

In GeneticRoutines.py file we implemented the selection, mutation and crossover methods which in turn returns the offspring which is used as chromosome in next generation.

In TSP.py file we have taken the distances between items and the corresponding locations of items in string and tuple format using Itemloc class and to find the route using Route class.

In mod-Graphic.py we visualized the how picking of items done in a ware house based on the locations using pygame and metrics like performance of algorithm on local maximum values. Using tkinter we implemented Graphical user interface (GUI) to pick the available items in a ware house by selecting the required available items.

On selecting the required items Genetic algorithm runs based on the number of generations or it can be limited on time basis. Suppose picker selects 10 items on various locations in a ware house then algorithm running can be limited by generations for example we have to limit the generations to 10,000 or for example we have to limit the algorithm for 60 seconds.

As picking items increases the number of generations generated per second decreases. For that purpose it is good to limit algorithm on number of generation basis.