

Objectives and reading materials for Project 3.

Goals and objectives:

The main goal of this project is to develop an algorithm that can produce approximate solutions to the Traveling Salesman Problem (TSP) efficiently. The TSP requires us to determine the shortest route through a set of cities such that each city is visited exactly once and we get back to the starting city. The objectives for this project include:

- (1) Understand code written in MATLAB.
- (2) Learn two popular algorithms used for solving the TSP: Genetic Algorithm (GA) and 2-opt.
- (3) Create hybrid codes using GA and 2-opt.
- (4) Test these hybrid codes for various TSP scenarios.
- (5) Analyze the results obtained.

All work is computational. MATLAB will be extensively used for this project.

Reading materials (Attached).

Regards,
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