IMPLEMENTATION CLARKE AND WRIGHT’S SAVINGS ALGORITHM TO SOLVE CAPACITATED VEHICLE ROUTING PROBLEM (CVRP)

ABSTRACT

Model to choose vehicle route is known as Vehicle Routing Problem (VRP). VRP is related to optimal routing problem that involve more than one vehicle of each capacity to serve customer’s demand. Capacitated Vehicle Routing Problem is one of VRP form which each of vehicle has finite capacity. Solution in this research use Clarke and Wright’s Savings Algorithm. This algorithm may get a route deend to vehicle capacity and customer’s demand. Data that use in this research is distance between source and customer, between each customer, customer’s demand and vehicle’s capacity. In this research, the resolution of CVRP by using Clarke and Wright’s Savings Algorithm. From the results of the solution by using Clarke and Wright’s Savings Algorithm obtained 5 optimal route with vehicles of different capacities.

Keyword: Vehicle Routing Problem (VRP), Capacitated Vehicle Routing Problem (CVRP), Clarke and Wright’s Savings Algorithm