Report

Using local search

1. Randomly initialize the tour
2. Swap the city. (How? See Below)
   1. Split the tour into smaller tours with just three cities. Of the smaller tours find the two tours with the greatest total distance.
   2. Then find the greatest distance between the cities of the smaller tours with the greatest total distance. If the greatest distance is the original tour origin city, then use the second greatest total distance.
3. If the swap resulted in the total distance to increase, then add the smaller tour to the tabu list. We will only explore smaller tours that aren’t in the tabu list to avoid cycling.
4. Do this ten times.
5. Do a random restart thirty times to ensure that an optimal solution is found.