



TSP Solvers

ICDF 2021 PYTHON CLASS

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Content

- Nearest Neighbor Algorithm.
- Variable Neighborhood Search.
- 2-opt.
- Swap.

Nearest Neighbor Algorithm

1. Label cities as unvisited.
2. Select any random initial city and mark as visited.
3. Find the nearest non-visited neighbor city
4. Set found city as current city and mark as visited.
5. Repeat until all cities are marked as visited.

Variable Neighborhood Search

1. Select moving operators or neighborhood structures N_k , $k=1, \dots, k_{\max}$.
2. Generate initial solution x .
3. $k = 1$
4. Generate neighborhood of x and get the best x' in N_k
5. If improvement, increment $k = k + 1$.
6. Back to 4, until $k = k_{\max}$.
7. Repeat to 3, n times.

2-opt algorithm

