Implement a 2-Approximation for TSP with Triangle Inequality

Given a complete weighted graph that satisfies the triangle inequality, implement a 2-approximation algorithm for the Traveling Salesman Problem (TSP).

- Input: Distance matrix.
- Output: Approximate tour and its total cost.

Tasks:

- Construct a Minimum Spanning Tree (MST).
- Perform a DFS traversal of the MST to get a preorder walk.
- Return to the start to complete the tour.

Sample Input	Sample Output
4 0 10 15 20 10 0 35 25 15 35 0 30 20 25 30 0	95 0 1 2 3 0
Explanation: First line is the number of vertices and the next lines are the distance matrix..	**Explanation:** First line is total cost, second line is the tour.