

## Report

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For my final project, I tackled the Traveling Salesman Problem (TSP) using Minimum Spanning Trees (MST), employing different minimum population thresholds (600,000, 700,000, and 800,000) to trace the shortest possible path across vertices. Throughout this project, I delved into the intricate field of debugging and gained new knowledge with algorithms like the Hamiltonian circuit, Eulerian algorithm, and the TSP itself. One notable discovery was the scarcity of cities in the United States with populations exceeding 600,000—a contrast to my initial assumption of their abundance. This project significantly deepened my understanding of Java concepts, debugging methodologies, and the integration of real-world data into code. Overall, it was a rewarding journey that enriched my programming skills and problem-solving skills.