Proposal: Comparing Two MST Algorithms

We propose examining two algorithms that address the minimum spanning tree (MST) problem. The MST problem purposes finding a subset of edges in a connected weighted undirected graph that minimizes the total edge weight while including all vertices and avoiding cycles. The two MST algorithms we will compare are *Kruskal's MST algorithm* and *Prim's MST algorithm*.

These algorithms will be implemented as C++ programs. Running time will be measured using the library functions in <*sys/time.h*>. System clock values will be recorded before and after running each algorithm and then evaluated to produce an overall running time usable for comparison. Multiple iterations of each algorithm across varied inputs will be assessed in order to obtain more accurate results.