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Subject : Design and Analysis of Algorithm
Exp 2 : To implement Greedy technique

Kruskal's algorithm:-

1. First sort all edges from low weight to high
2. Take the edge with lowest weight and add to spanning tree.
3. If edge added creates cycle, reject edge
   Continue to add edges until we reach all vertices.

Functions used :-

1. cmp() → Comparator to sort the edges
2. makeSet() → To initialize parent and rank array
3. findParent() → To find parent of node
4. unionSet() → To perform union operation by updating parent and rank array
5. MST_using_kruskal() → Print MST and total weight of MST

Prim's algorithm :-

Functions used :-

1. findMinVertex() → find unvisited vertex with minimum edge weight
2. MST_using_prim() → Print MST and total weight of MST

A graph of time taken to compute MST was plotted for both algorithms. The graph shows that Kruskal's algorithm performs faster for all 3 cases [8, 15, 20 vertices]