

IT LAB - M.TECH CS

Lab - 5

September 18, 2017

Using Heaps in Kruskal's Algorithm:

1. Write a program to implement Kruskal's algorithm to obtain Minimum spanning tree (MST) from a weighted undirected graph. The graph may not be connected. Implement the algorithm in two ways: (i) Sort the edges using 'qsort' function and (ii) pick the minimum using a heap implementation.

Input: Input is given in a file with first line containing number of vertices followed by the graph given as an edge list. Assume weights given are positive.

n
u v w(u, v)

Output: The MST along with the time taken by the two implementations. **Submit the assignments to mtechalgo2017@gmail.com**