CSE 208
Offline 1: MST
Date: 25/05/2022

You're trying to figure out the best way to arrange for internet access in your small city. There are N ($3 \leq N \leq 1000$) households in your city connected by M ($N \leq M \leq 10000$) various roads and you can walk between any two houses in the town by traversing some sequence of roads. However, you've got a limited budget and have determined that the **cheapest way** to arrange for internet access is to build some fiber-optic cables along existing roadways. You have a list of the costs of laying fiber-optic cable down along any particular road, and want to figure out the minimum cost you'll need to successfully complete the project. At the end, **every house will be connected** along some sequence of fiber-optic cables.

Luckily, as a CSE student you know Prim's and Kruskal's algorithms.

Task 1:Implement Prim's algorithm and Kruskal's algorithms

Sample input (file mst.in)
6 9
0 1 1.0
1 3 5.0
3 0 3.0
3 4 1.0
1 4 1.0
1 2 6.0
5 2 2.0
2 4 4.0
5 4 4.0

Output:
Cost of the minimum spanning tree : 9.0
List of edges selected by Prim's: {(0,1),(1,4),(4,3),(4,5),(5,2)}
List of edges selected by Kruskal's:{(0,1),(1,4),(4,3),(5,2),(4,5)}

Deadline: 31/05/2022 11:55 pm.