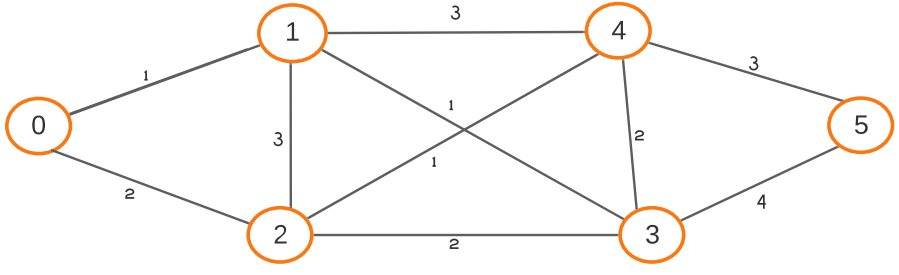
V=6
E=10
In MST we will have V-1 edges

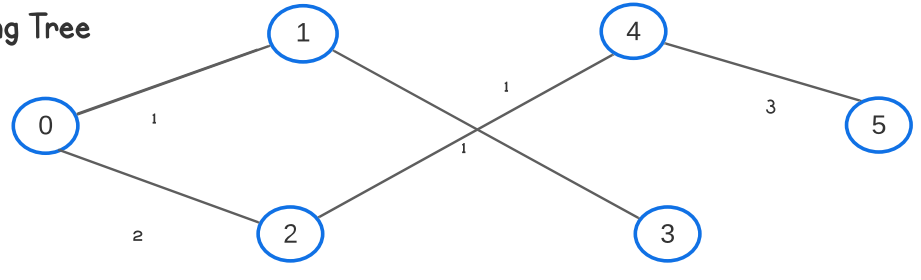
Kruskals Algorithm

Source	Destination	Cost
0	1	1
1	3	1
2	4	1
0	2	2
2	3	2
3	4	2
1	2	3
1	4	3
4	5	3
3	5	4



Edges = V-1 = 5
Minimum cost= 1+1+1+2+3 = 8

Minnimum Spanning Tree



Sorting

Time Complexity

O (E Log (E) + E Log (V))

Complexity for sorting all edges

To check cycle we will use DSUF disjoint set union find algo, it takes O (log(V)) for each edge.And in worst case we will compute for all edges