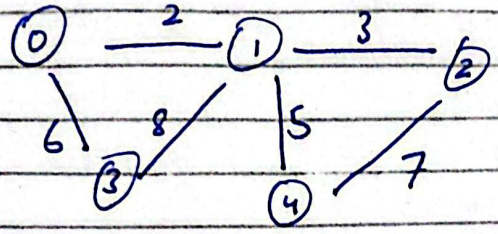
Minimum Spanning tree.

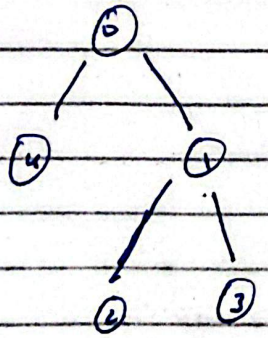


edges = 6

Node = 5

definition:

A tree in which we have N nodes and N-1 edges. and all nodes are reachable from each other.



→ edges = 4

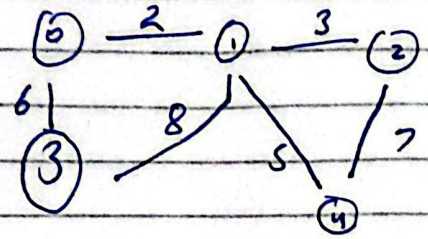
→ nodes = 5

→ All nodes are reachable from each other.

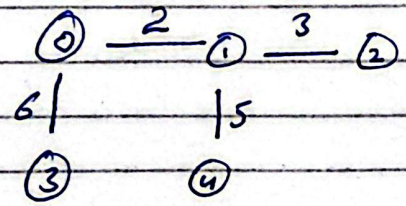
So this is a spanning tree

→ A graph can have many spanning tree.

from this graph:

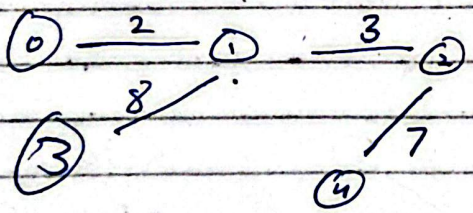


we can have these spanning trees:



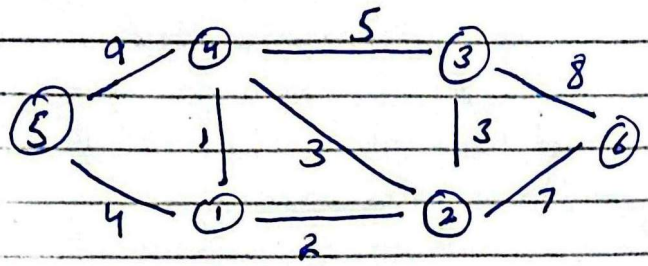
path sum = 16

this is MST cuz sum is less and least of them all.

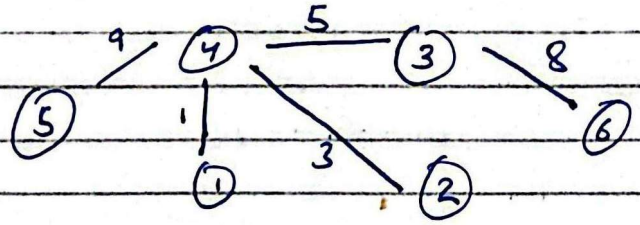


sum = 20

MSTs OF Following ~~trees~~: graph



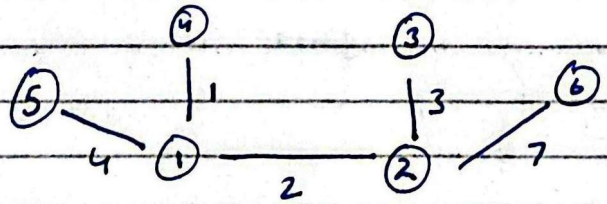
first:



nodes = 6
edges = 5

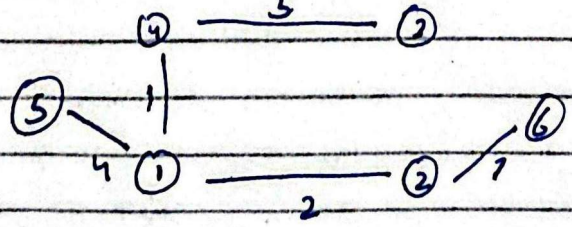
sum = 26

Seond:



nodes = 6
edges = 5
sum = 17

third



nodes = 6
edges = 5
sum = 19

I think second one is MST.

How to find the MST of the given graph?

① Prims Algorithm

② Kruskal Algorithm
↳ for this we need to understand Disjoint set data structure?