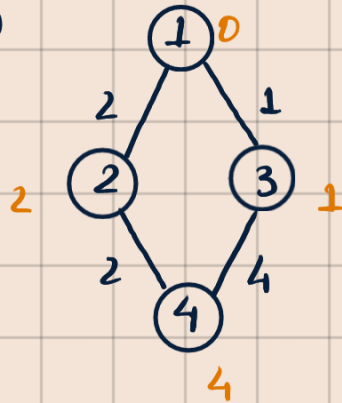


SPANNING TREE

Graph (V, E)

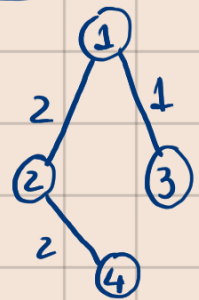
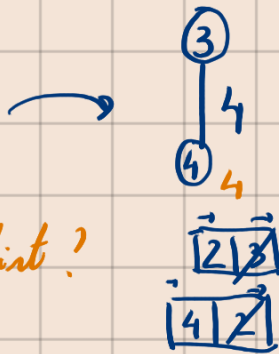
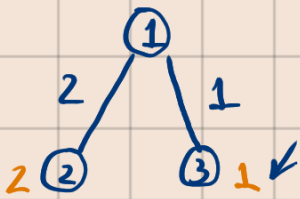


$$|E| - |V| + 1 = \text{no cycles}$$

PRIM → GREEDY

$$O(|V|^2) = O(m^2) / O(m \log m)$$

MS Tree:

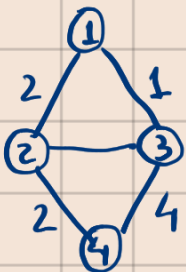


$$\text{total cost} = 2 + 2 + 1 = 5$$

mutable
min prior
weight < dist?

KRUSKAL → GREEDY

$$O(m \log m)$$



• sort edges



UNION SET

MS Tree:

