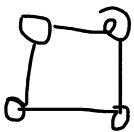
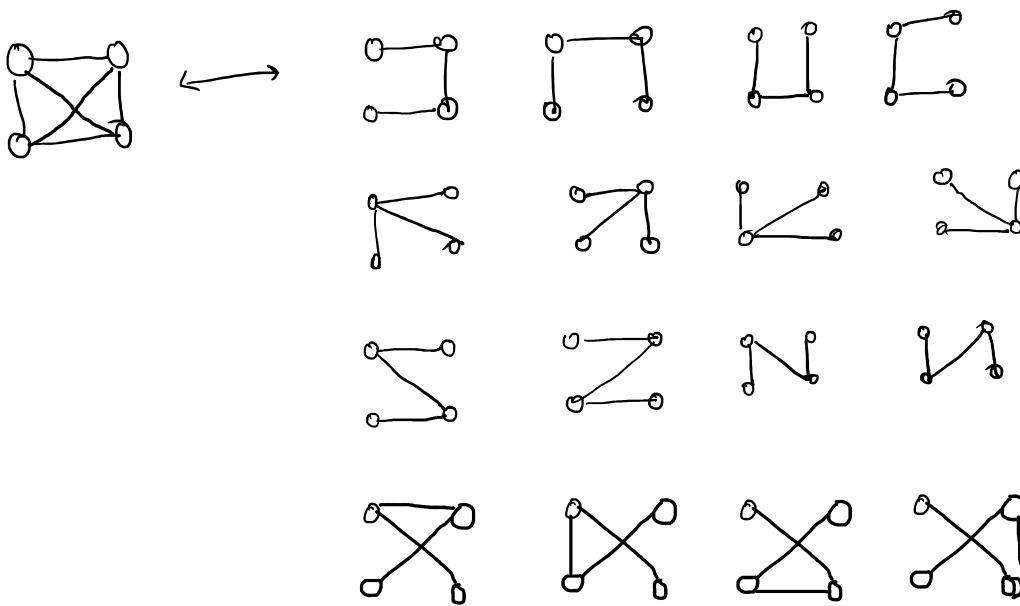
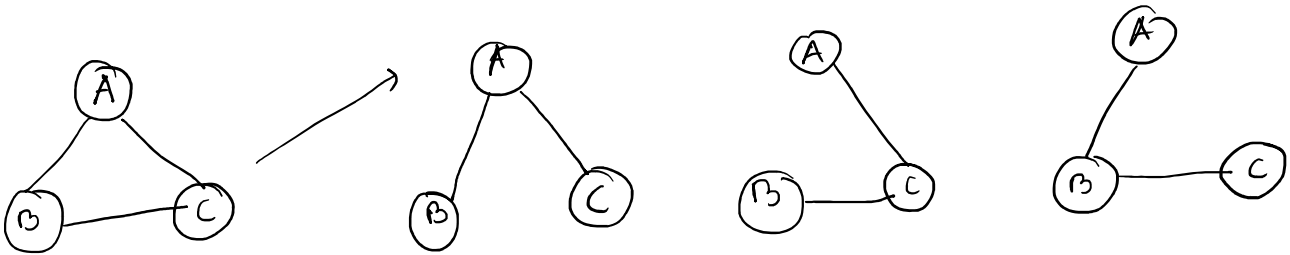


# MST

12 March 2025 17:41

Graph  $G$  = connected,  $N$  number of vertices

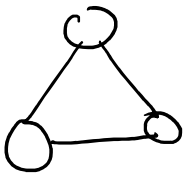
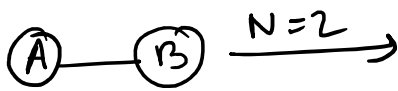
SPANNING TREE OF  $G$  = Subgraph of  $G$  where  $n$  = no of vertexes,  $n-1$  number of edges.



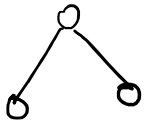
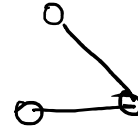
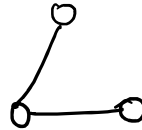
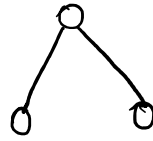
Spanning Tree -  $G(N, E) \rightarrow G'(N, N-1)$

$N$  = No of nodes  $E$  = edges.

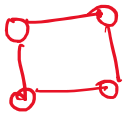
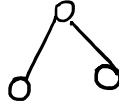
$\frac{ST}{A}$



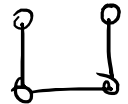
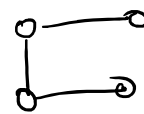
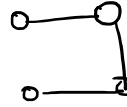
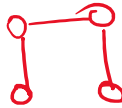
$N=3$



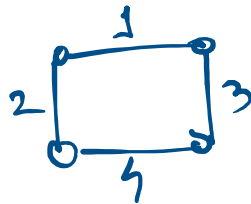
$N=3$



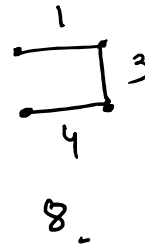
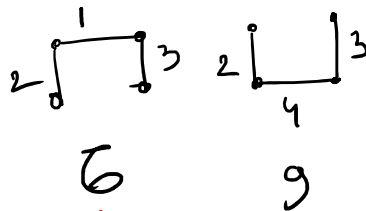
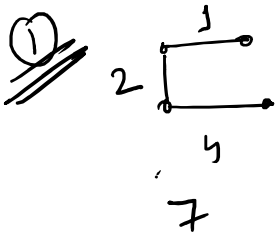
$\rightarrow$



MST-



① Graph - Cycle.  
ST  $\rightarrow$  No Cycle.



$\downarrow$   
MST

