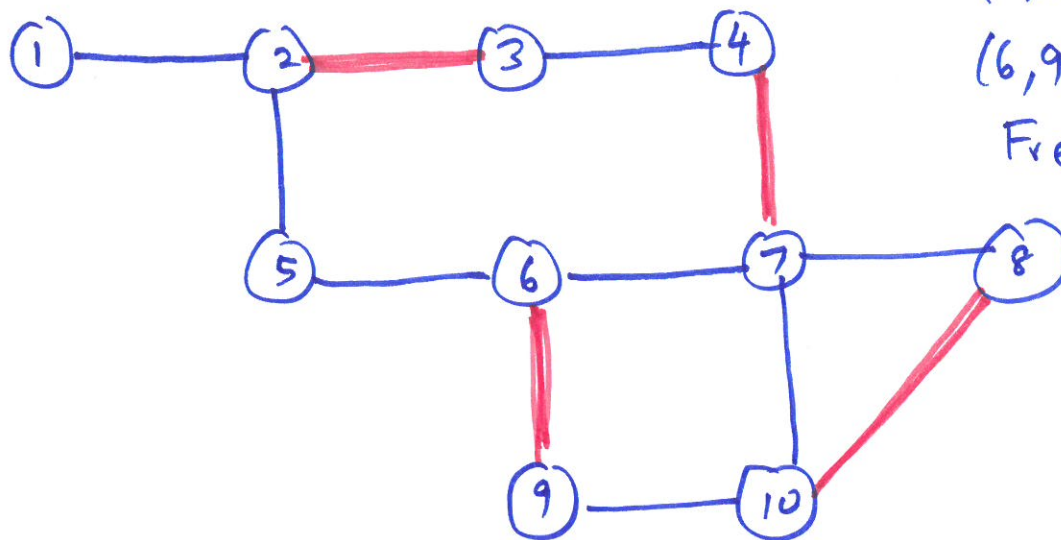
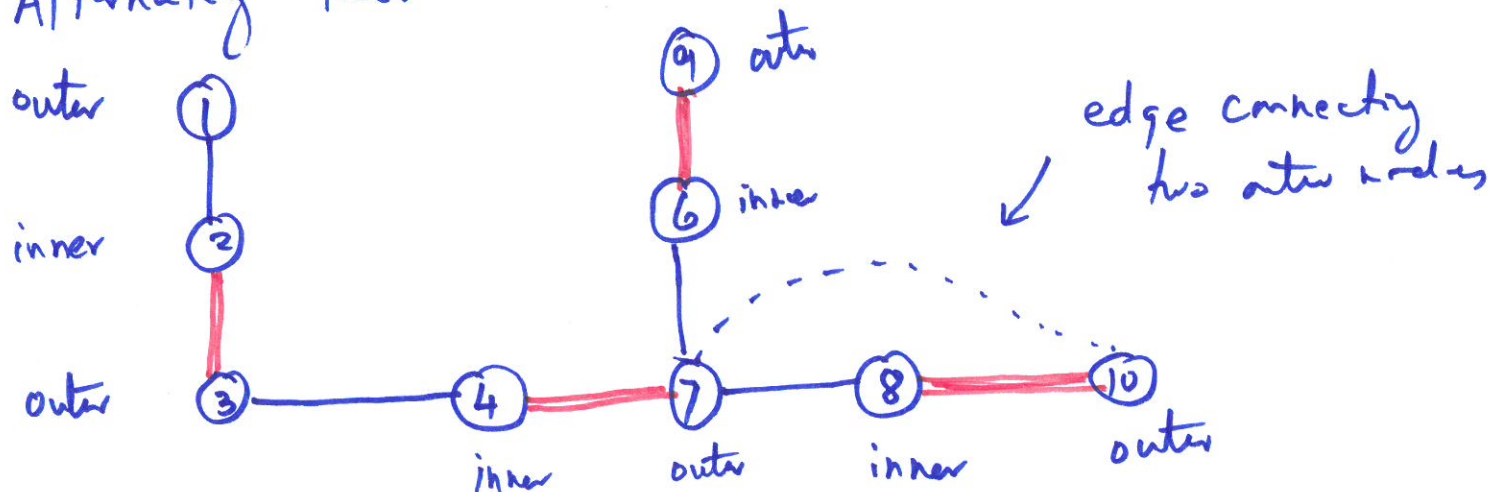


Larger example

Current matching :
 $(2,3)$ $(4,7)$
 $(6,9)$ $(8,10)$
 Free = $\{1, 5\}$



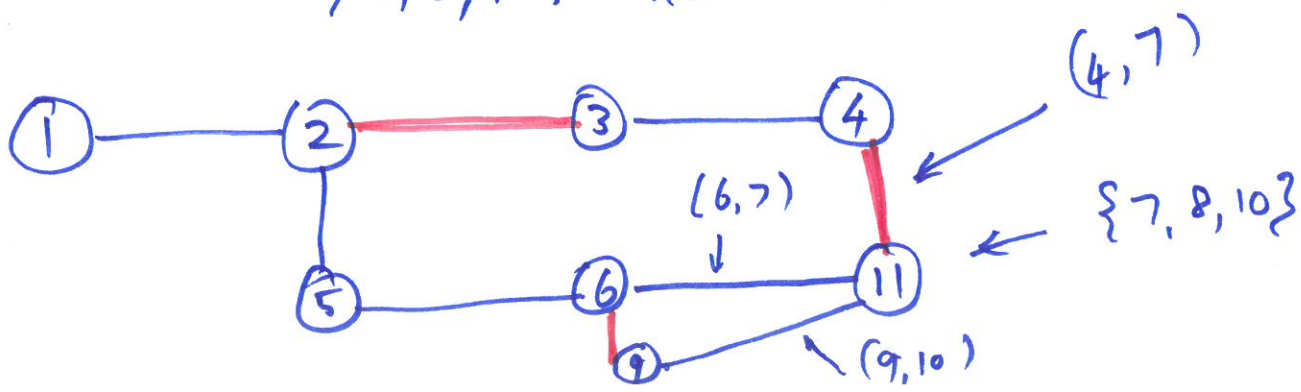
Alternating tree:



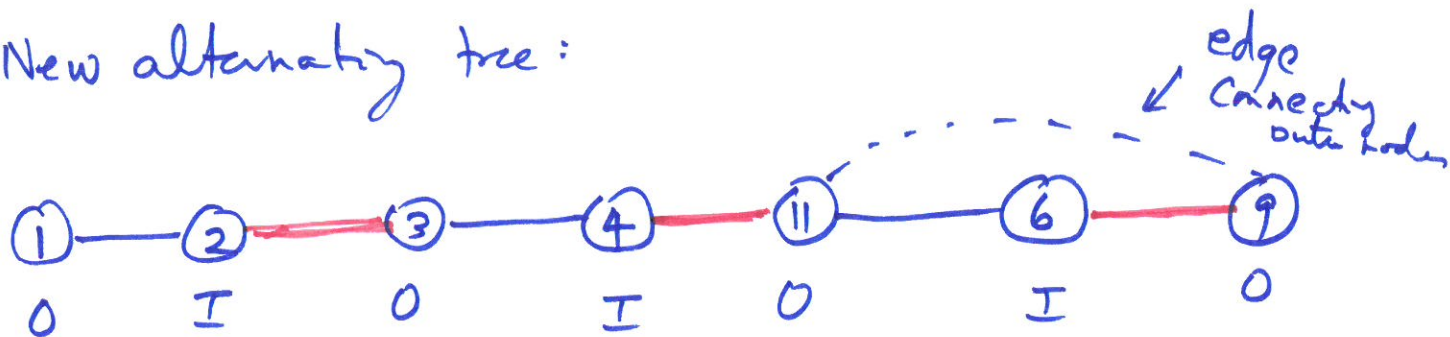
Blossom detected: LCA of 7, 10: 7

odd cycle: $10 - 8 - 7 - 10$

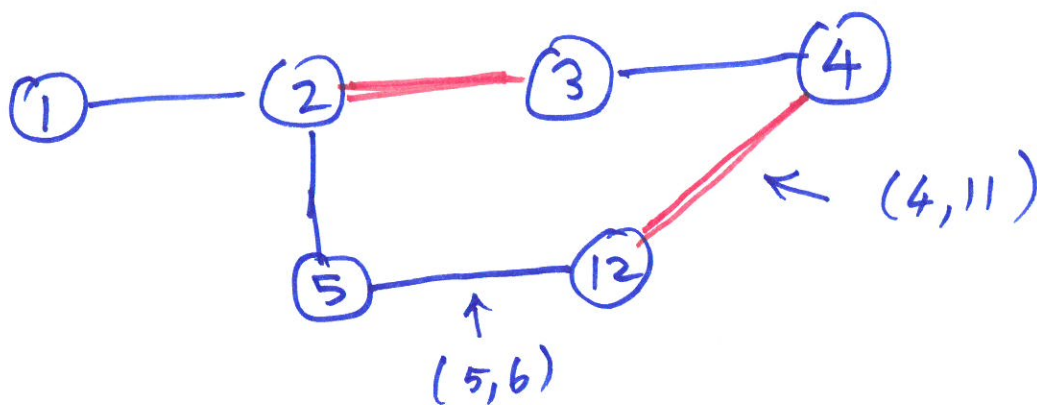
shrink $\{7, 8, 10\}$ into node 11.



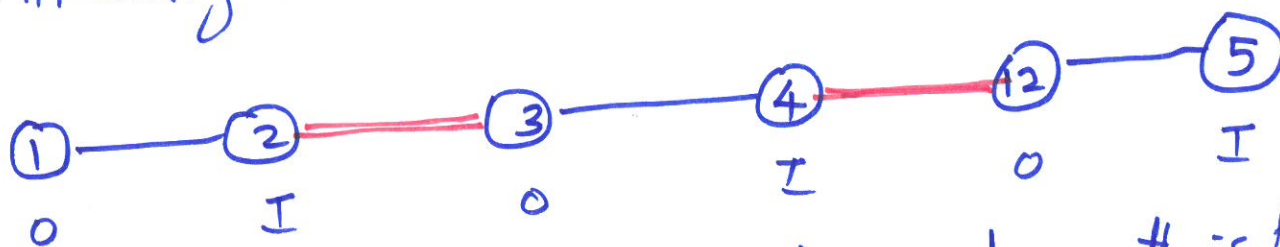
New alternating tree:



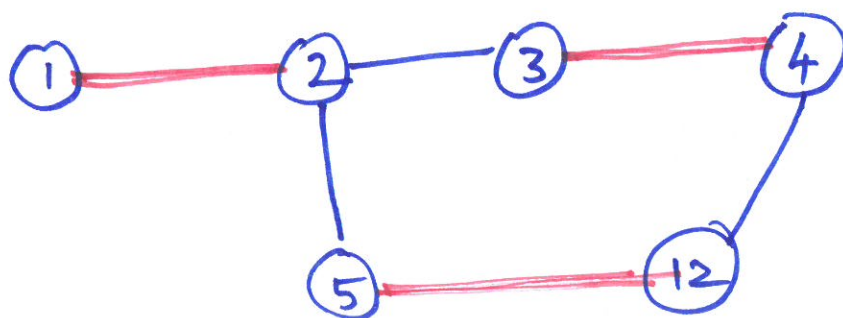
Blossom: $LCA(9, 11) = 11$ Cycle: $9-6-11-9$
 shrink $\{9, 6, 11\}$ into node 12.



Alternating tree:

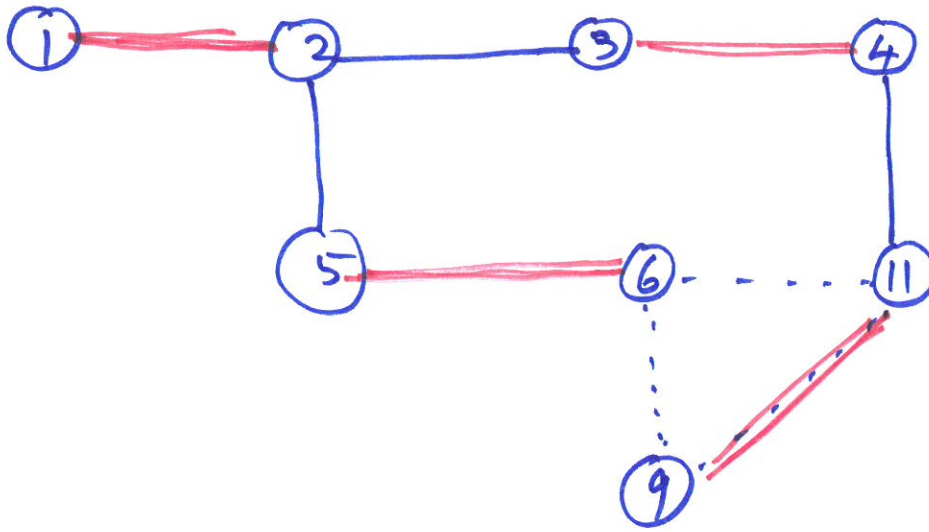


Free inner node 5 \Rightarrow Augmenting path is found.
 Update matching using this augmenting path:



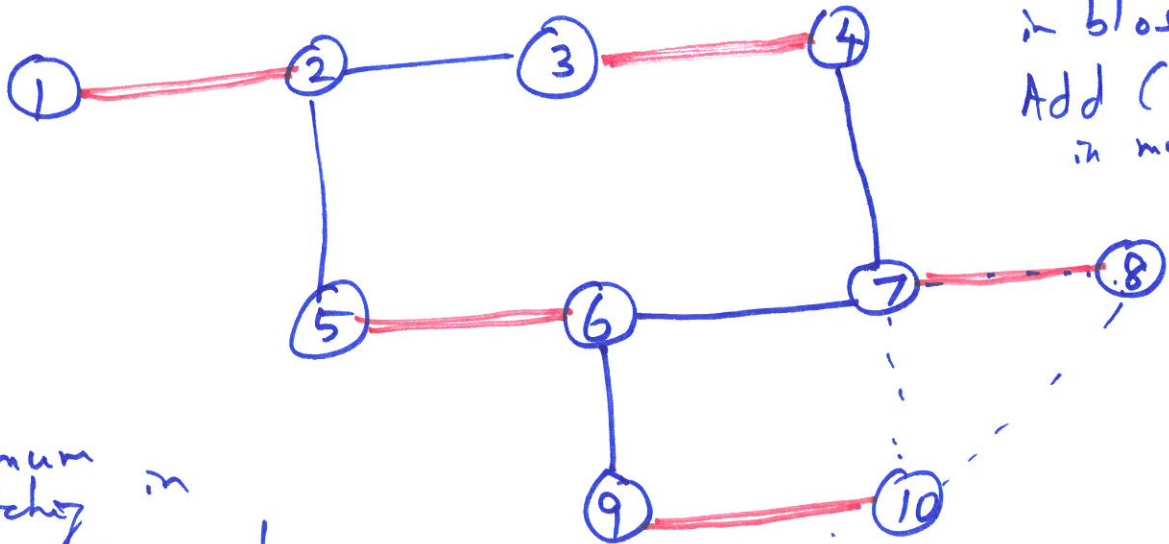
\leftarrow Max matching
 (no free nodes)

Expand node 12



6 is matched
in blossom.
⇒ Add (9, 11)
to matching.

Expand node 11 :



10 is matched
in blossom.
Add (7, 8)
in matching.

Maximum
matching in
original graph.