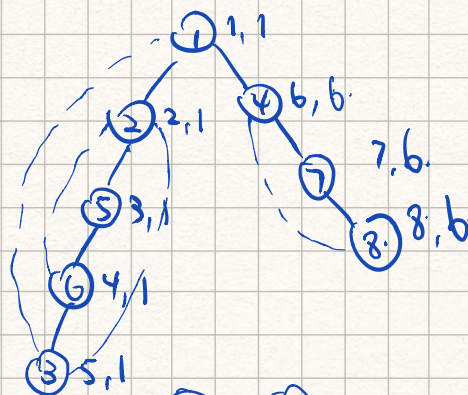
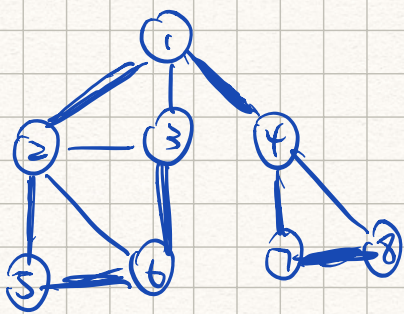


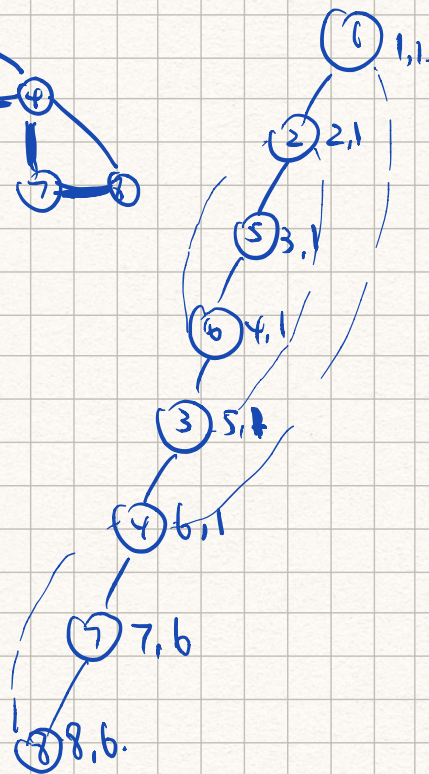
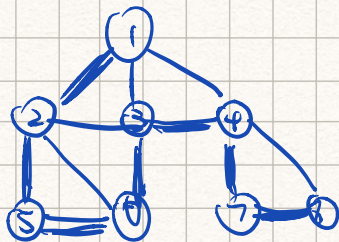
# Finding Articulation points



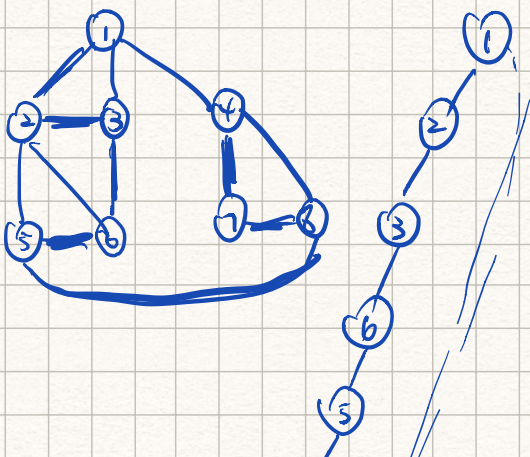
root has more than one child.  
yes!

① ④

lowest  $\leq$  previous yes!

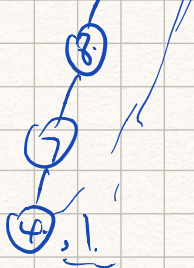


no articulation point.



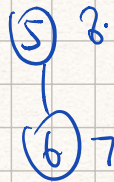
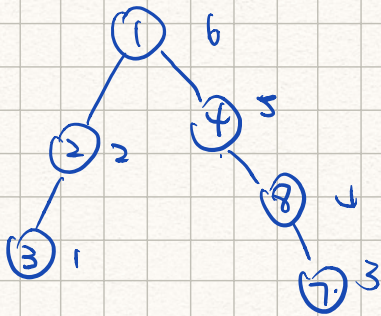
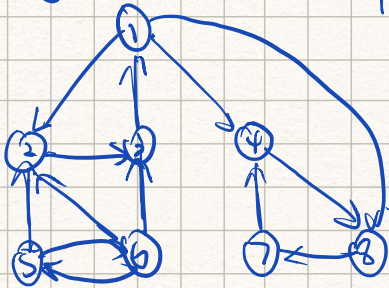
no articulation points.





Strongly connected components.

G



G\*

