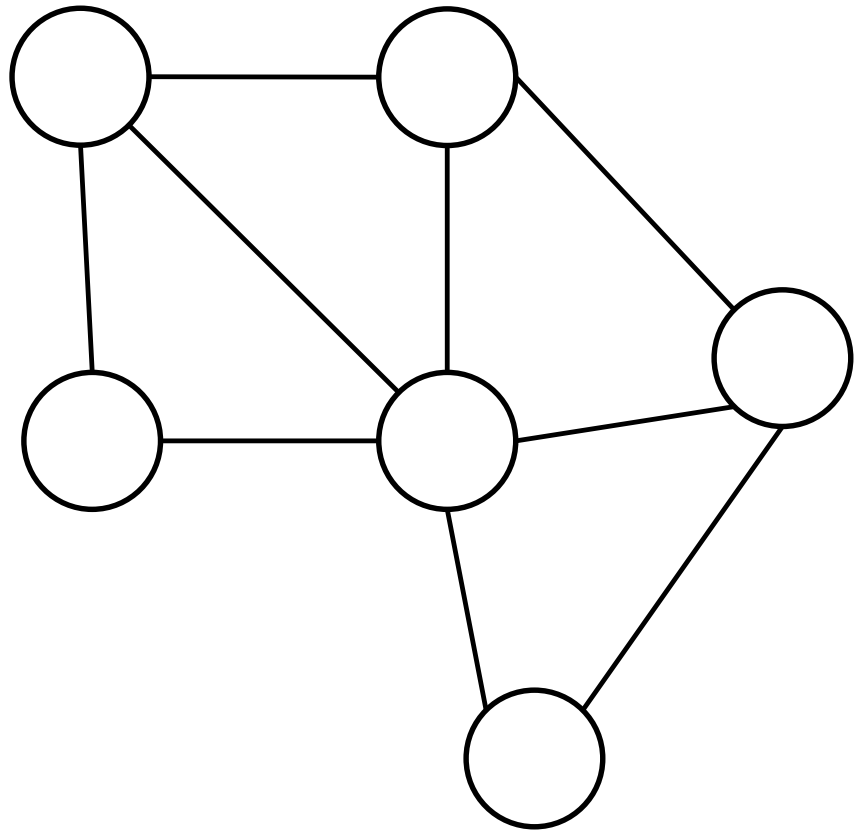
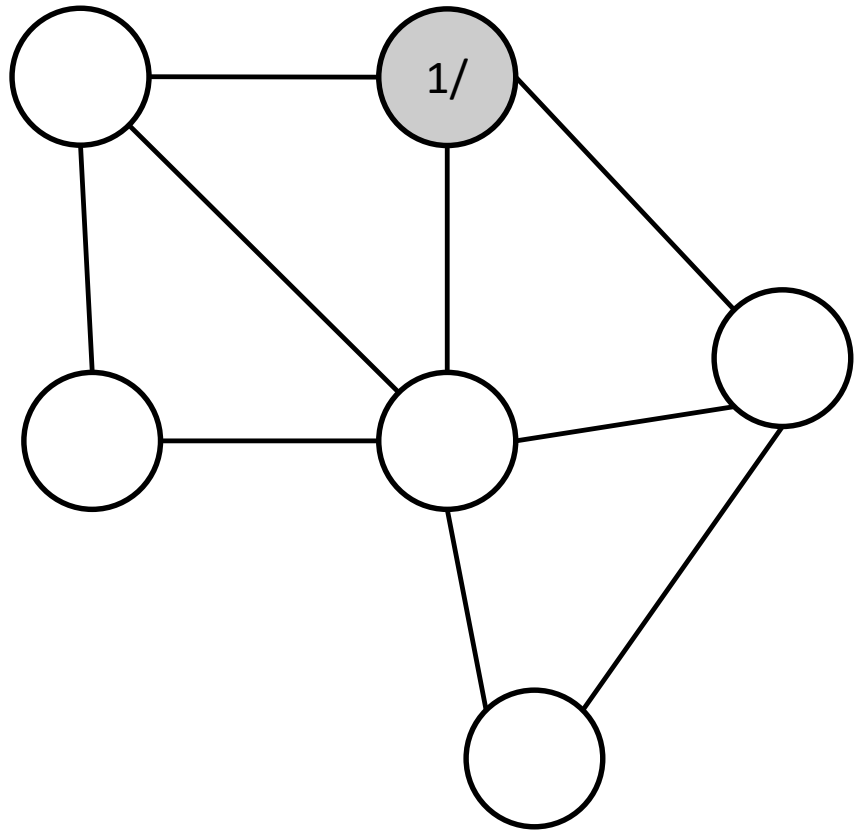
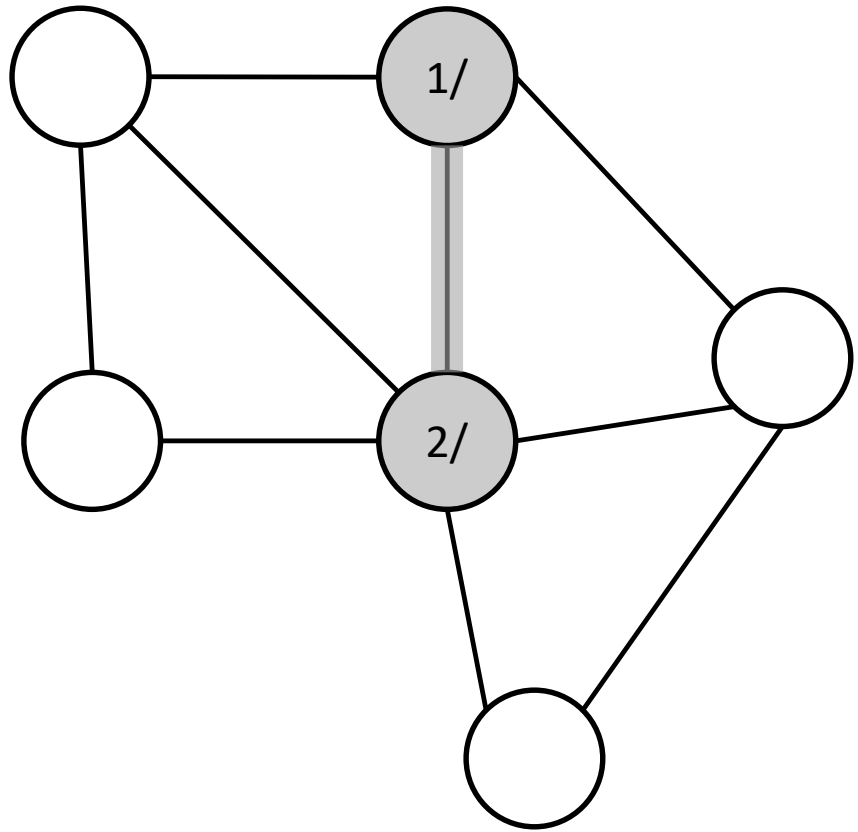


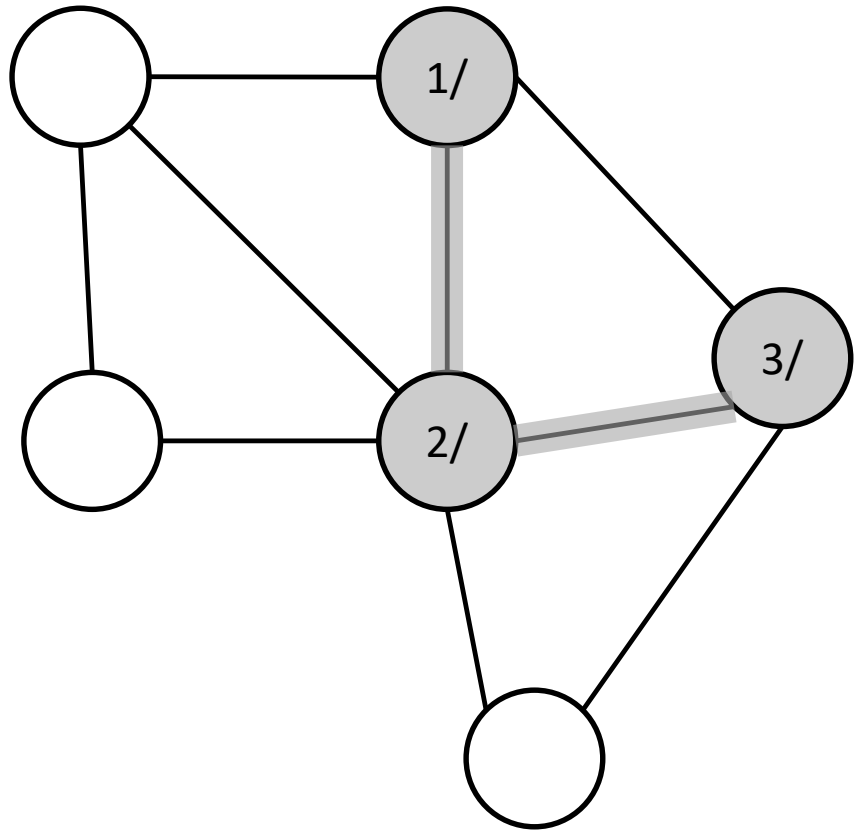
DFS in undirected graphs

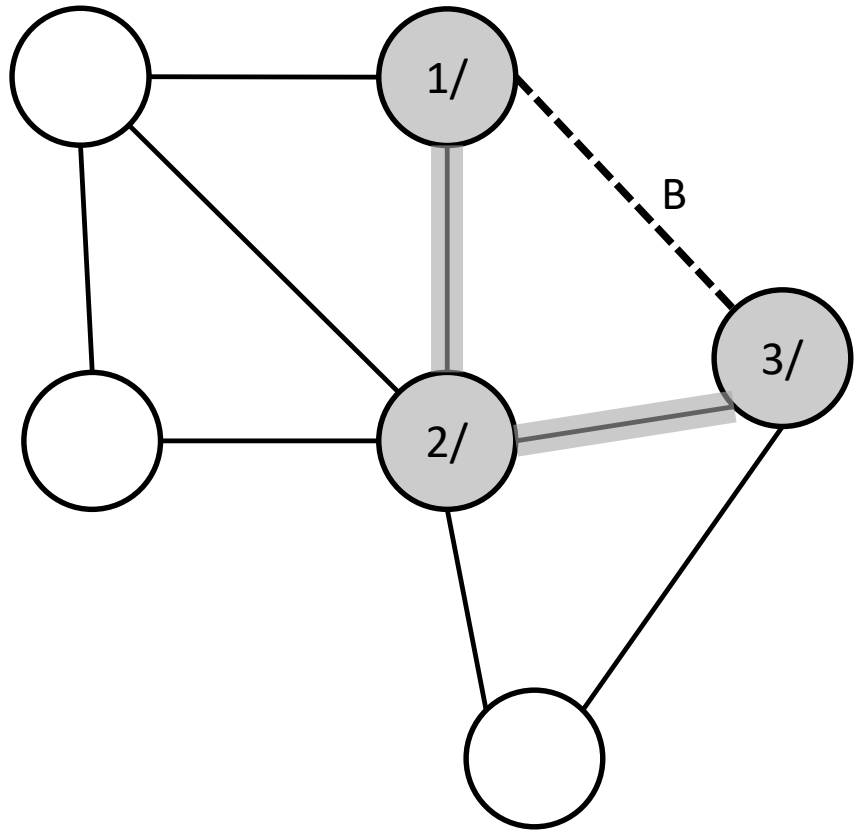
- Lets start with an example

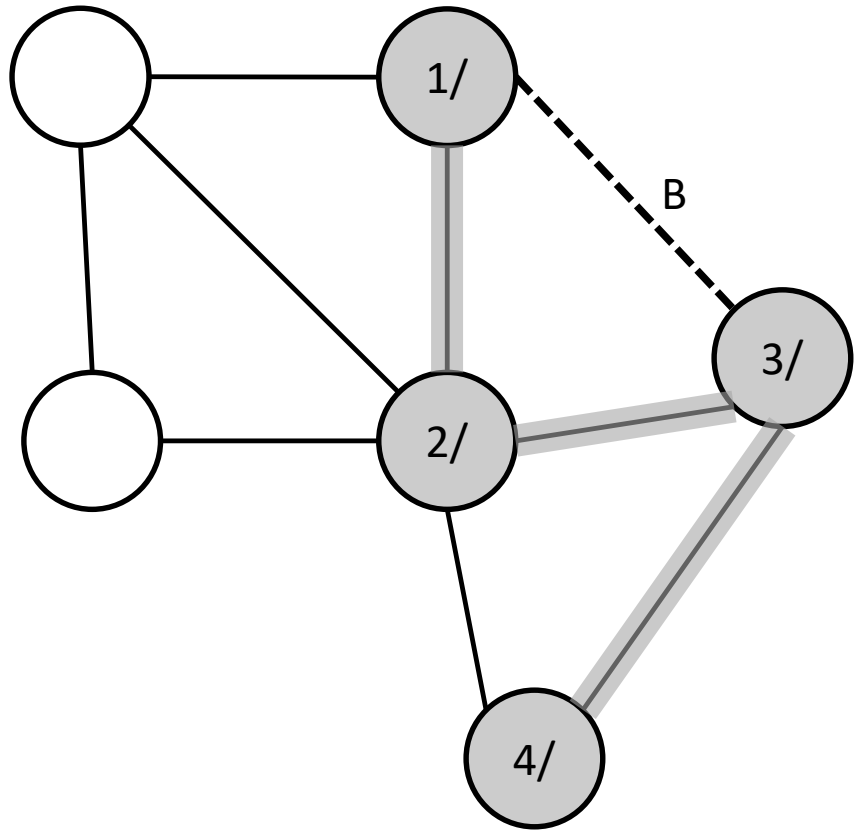


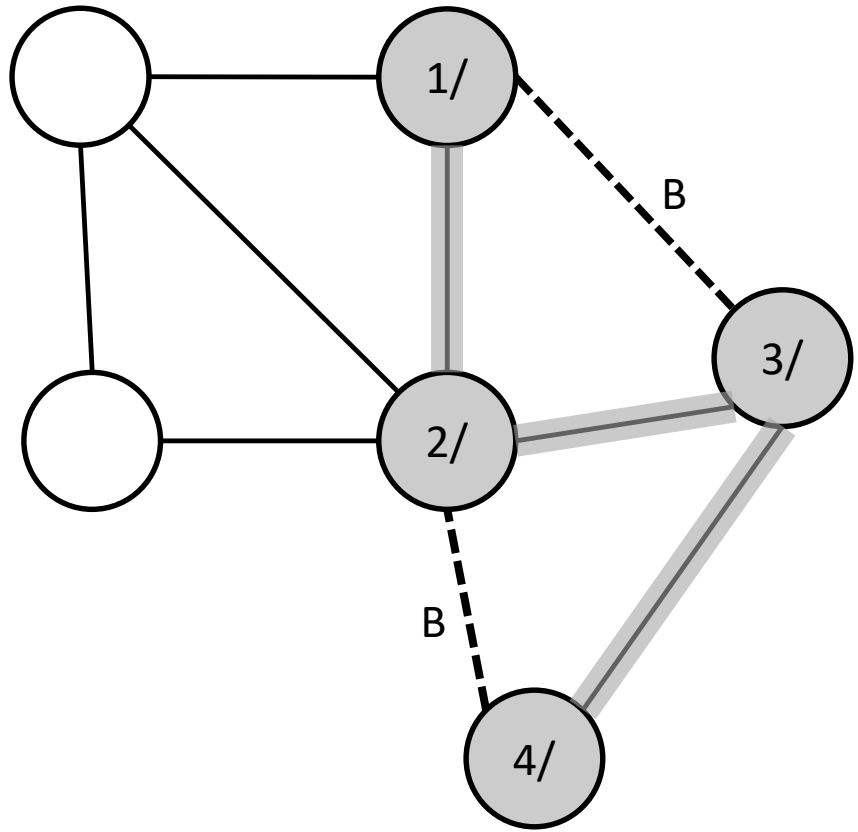


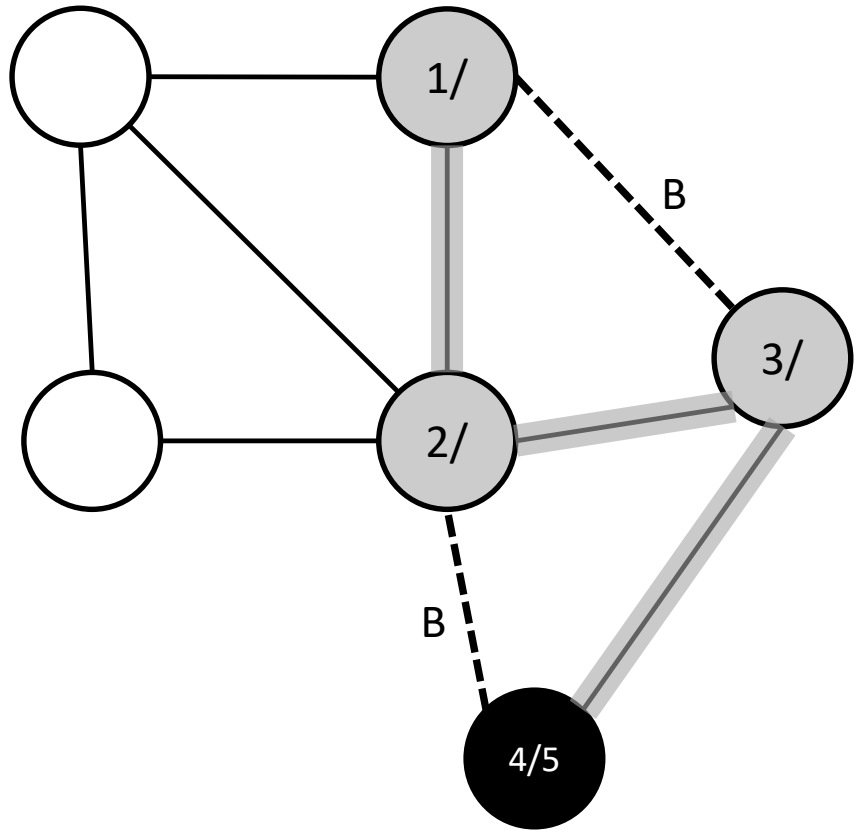


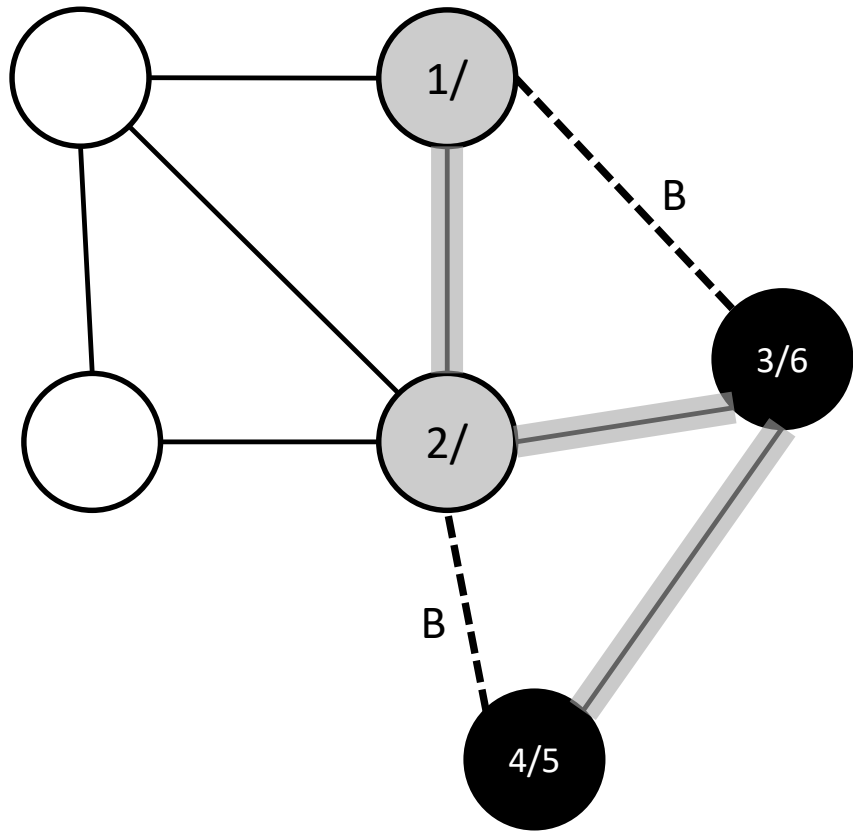


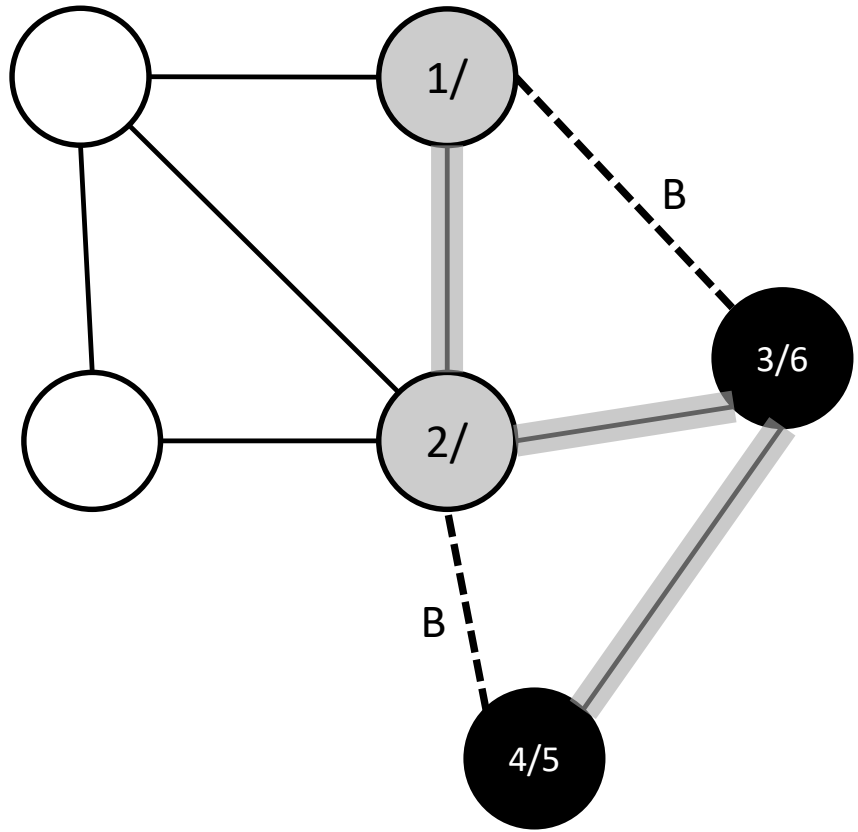


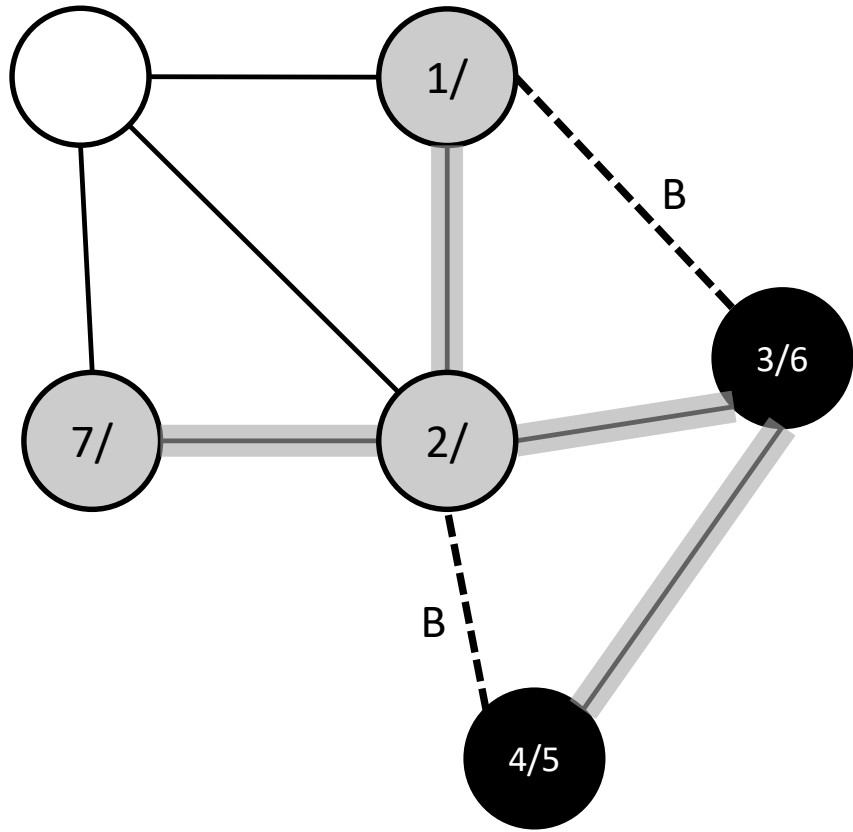


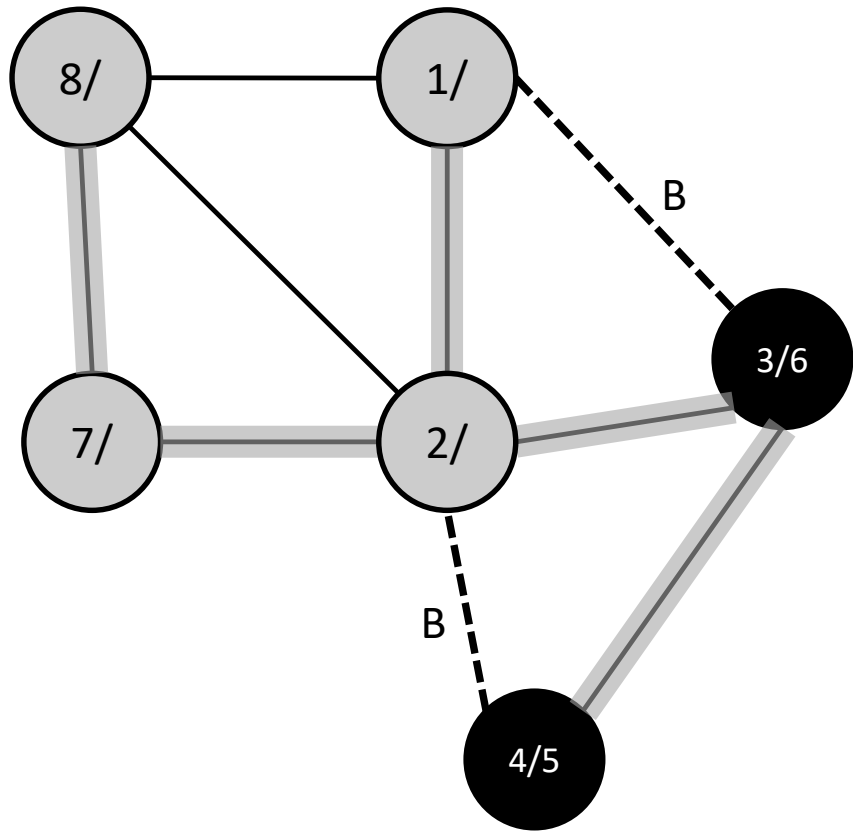


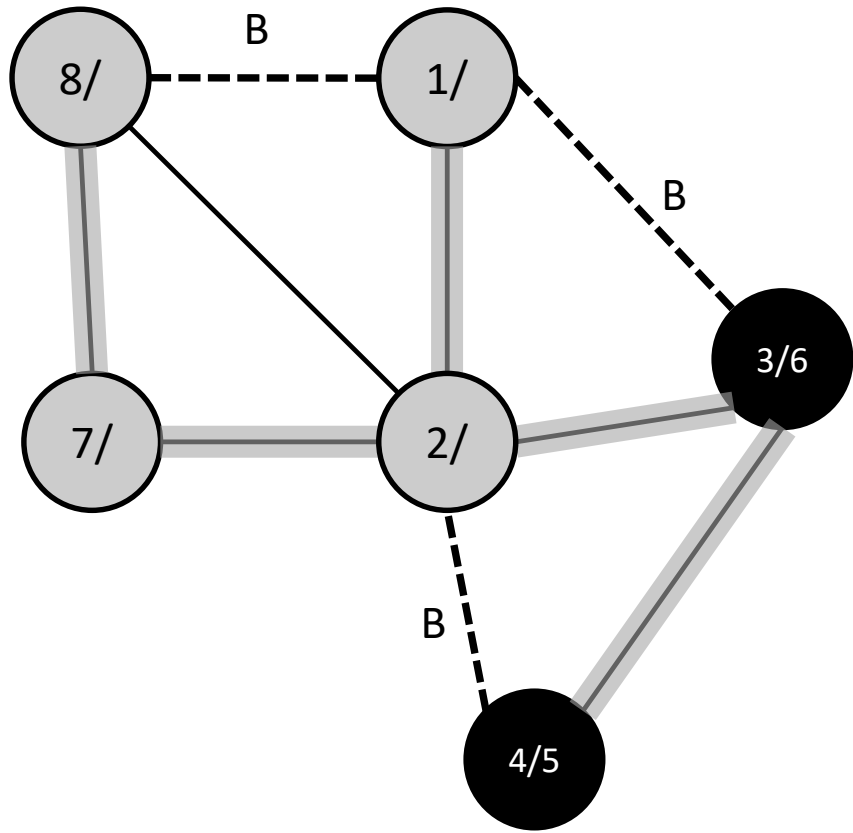


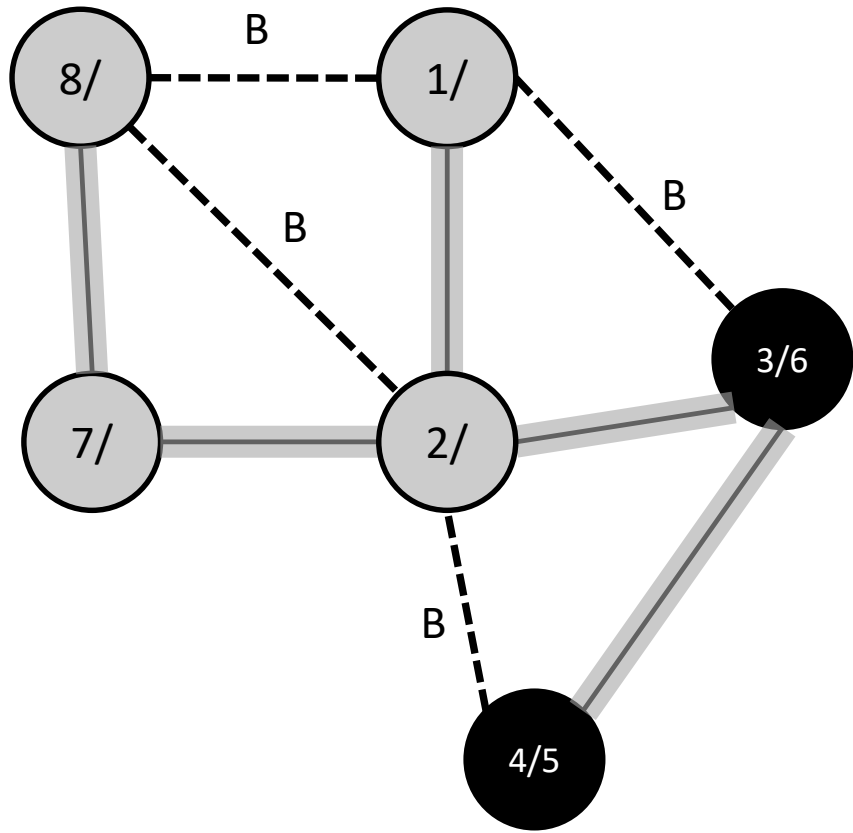


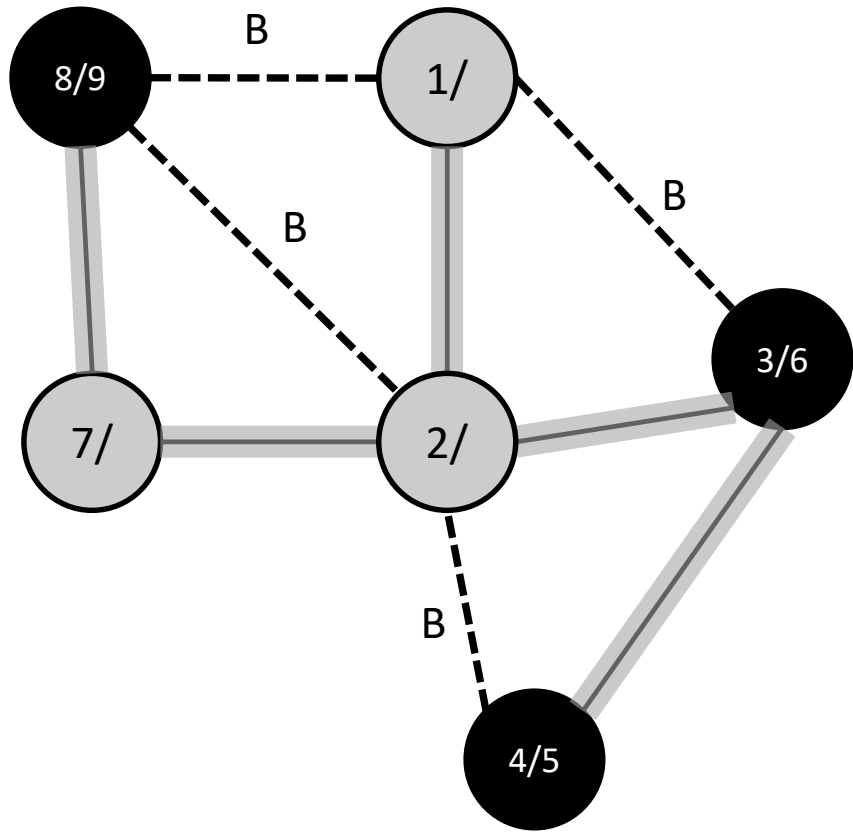


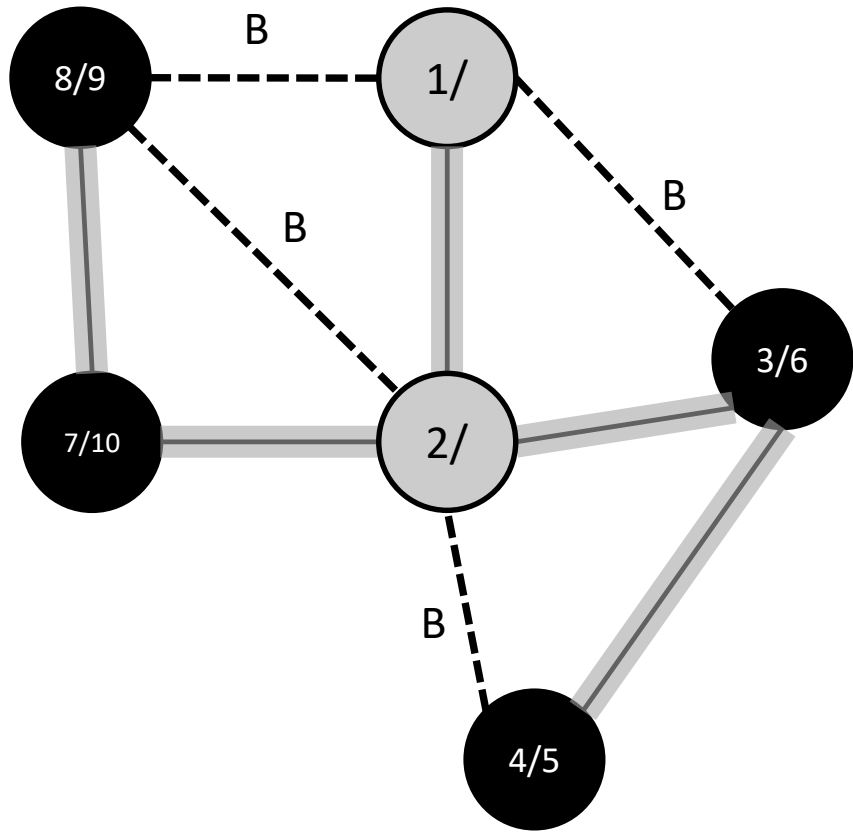


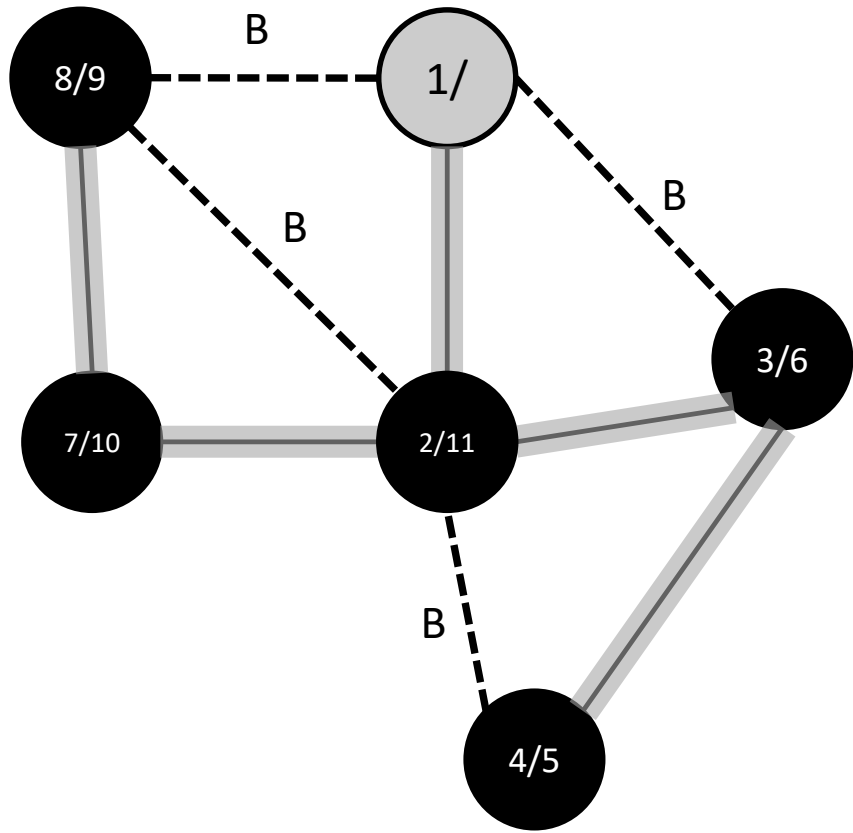


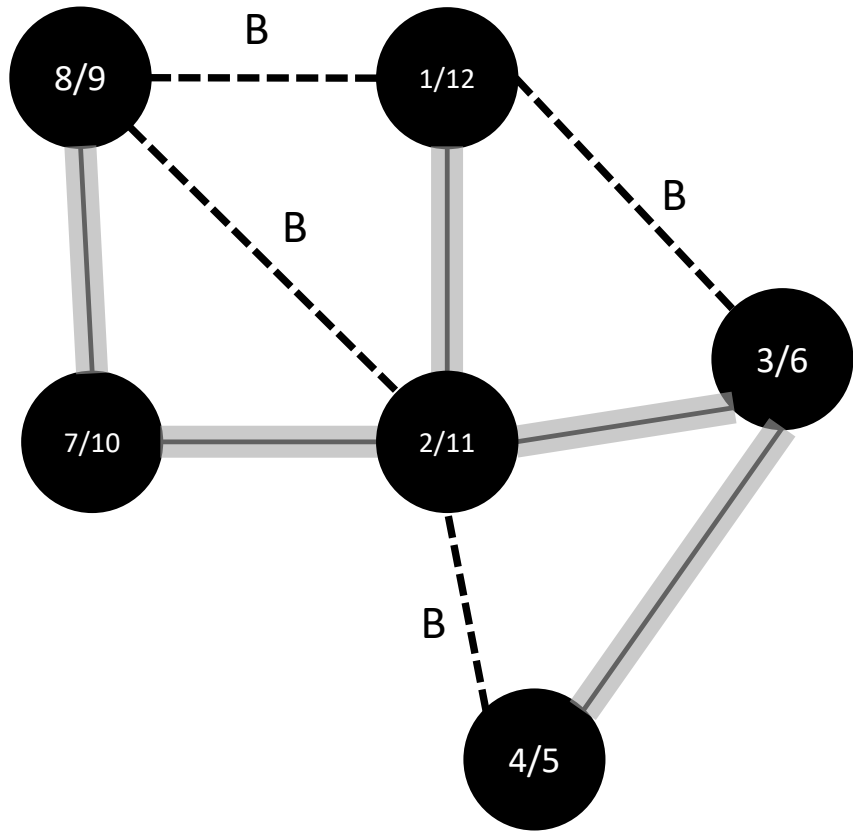








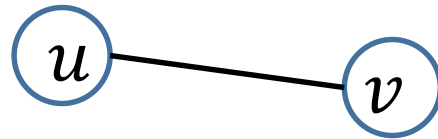




DFS in Undirected Graphs

Thm 5: No forward and cross edges (only tree and back edges)

Proof:



Assume $u.d < v.d$