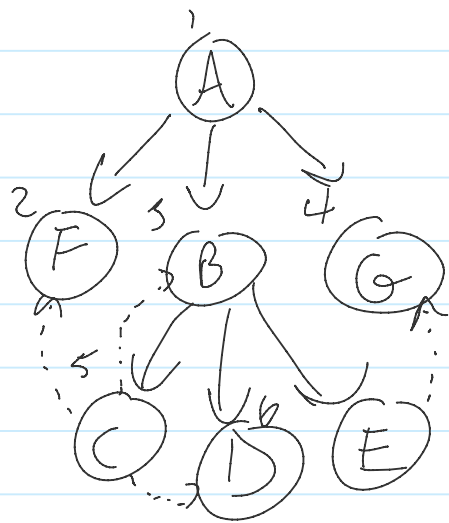
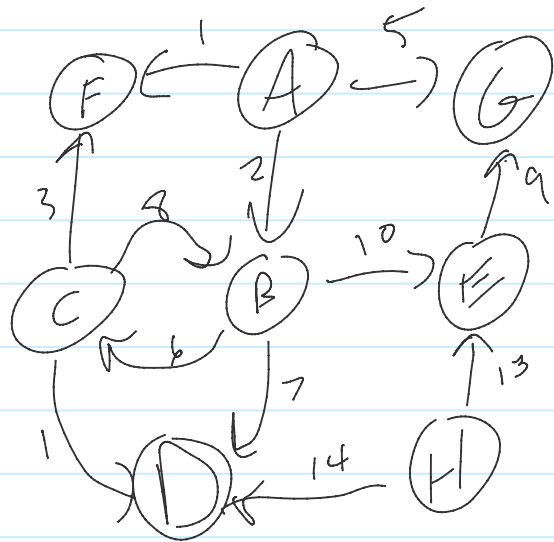


# Breadth (sp) First Search wide search



No 4D  
Parts

Missing Forward  
Edges

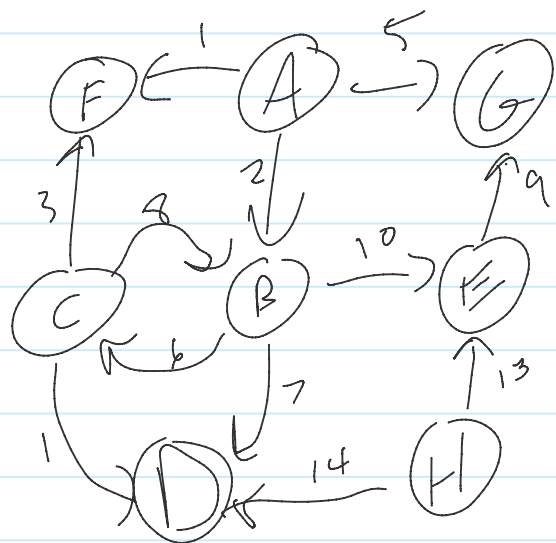
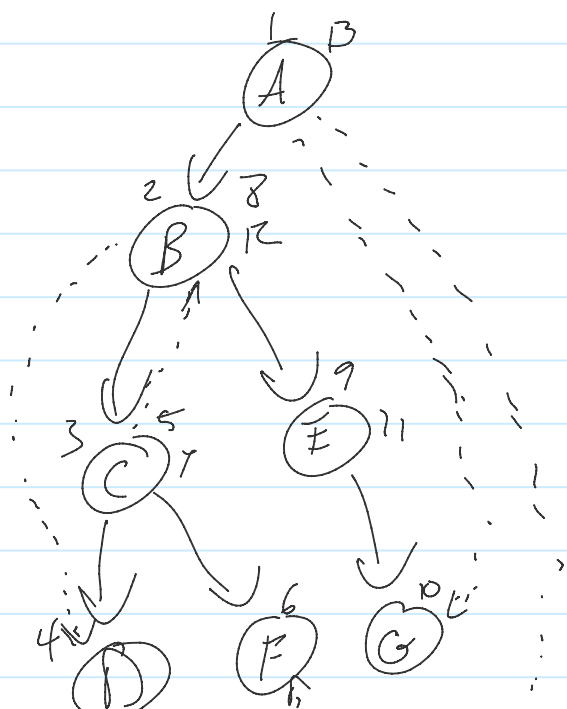
Visit nodes as wide as possible

Implementation

Queue

## DFS

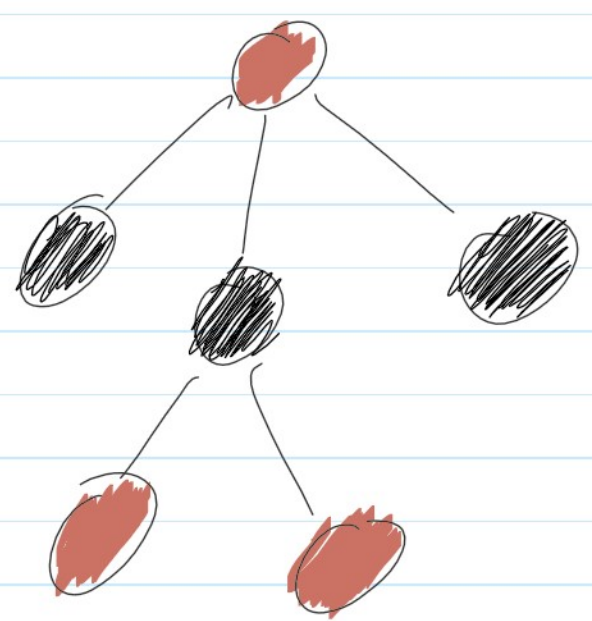
Deep search in tree as possible



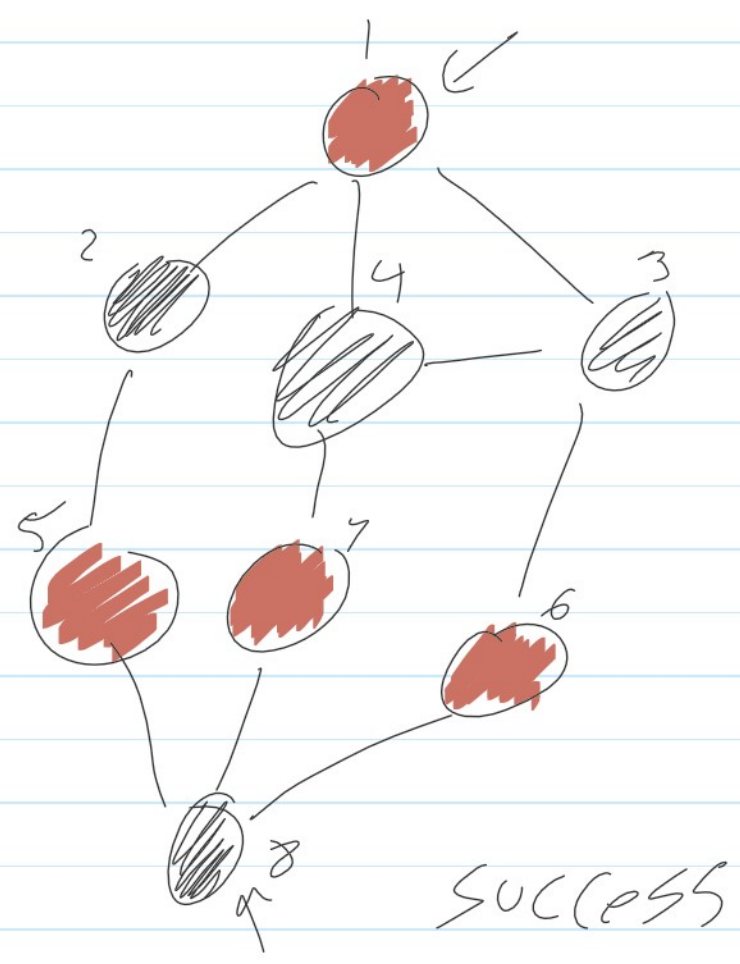


No Cross edges

# Graph 2-Coloring

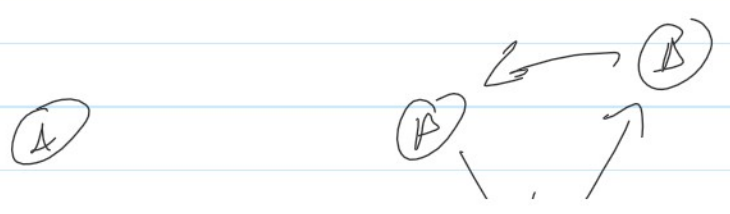


No Edge connects node with same color

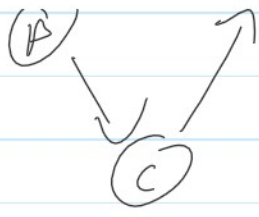


Success

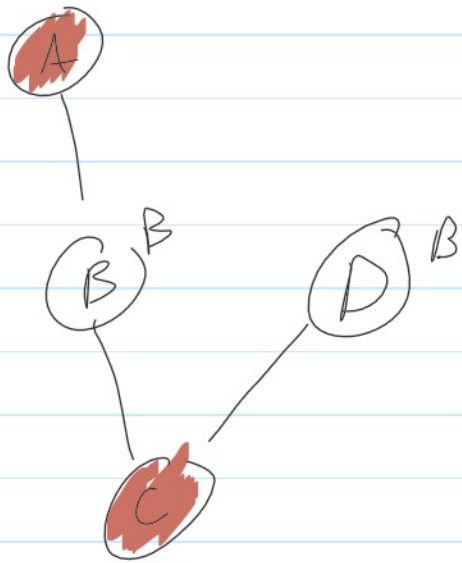
if (bfs(First Node))  
we are good



(A)



for (each node i)  
if (! bfs(i))  
we are bad  
we good!



Practice coloring

