CS211 ALGORITHMS & DATA STRUCTURES II
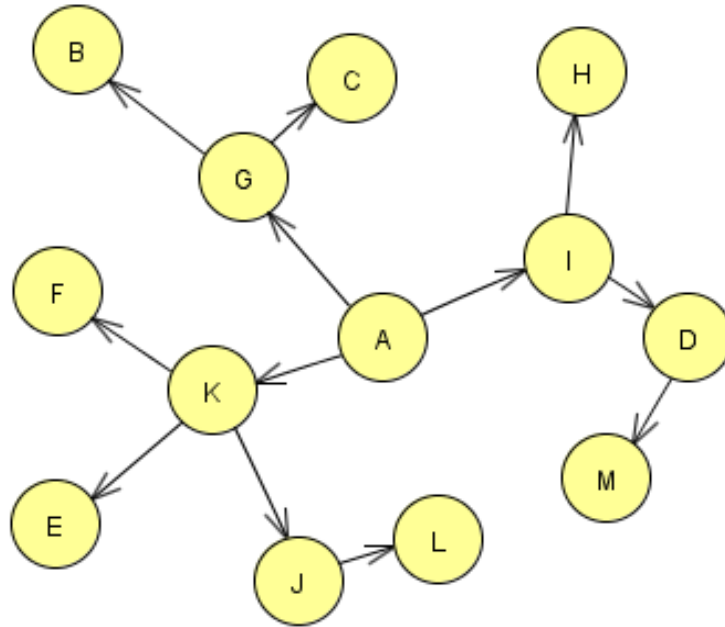
LAB 8

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GRAPHS

PART I: Pen and paper exercise

Show the orders in which breadth-first search and depth-first search would traverse the following graph starting at vertex A. Show how the contents of the search queue and search stack are updated during the searches.

PART II: Programming exercise

HackerRank will give you an array of 40 numbers drawn randomly. You should return a solution array consisting of 40 numbers containing symbols from the set {1, 0, -1} which minimizes the difference between the numbers on one side (the +1s), and the numbers on the other (the -1s). Play this game to see exactly what is required: http://www.cs.nuim.ie/courses/compthink/app2/scalesapp/index.html