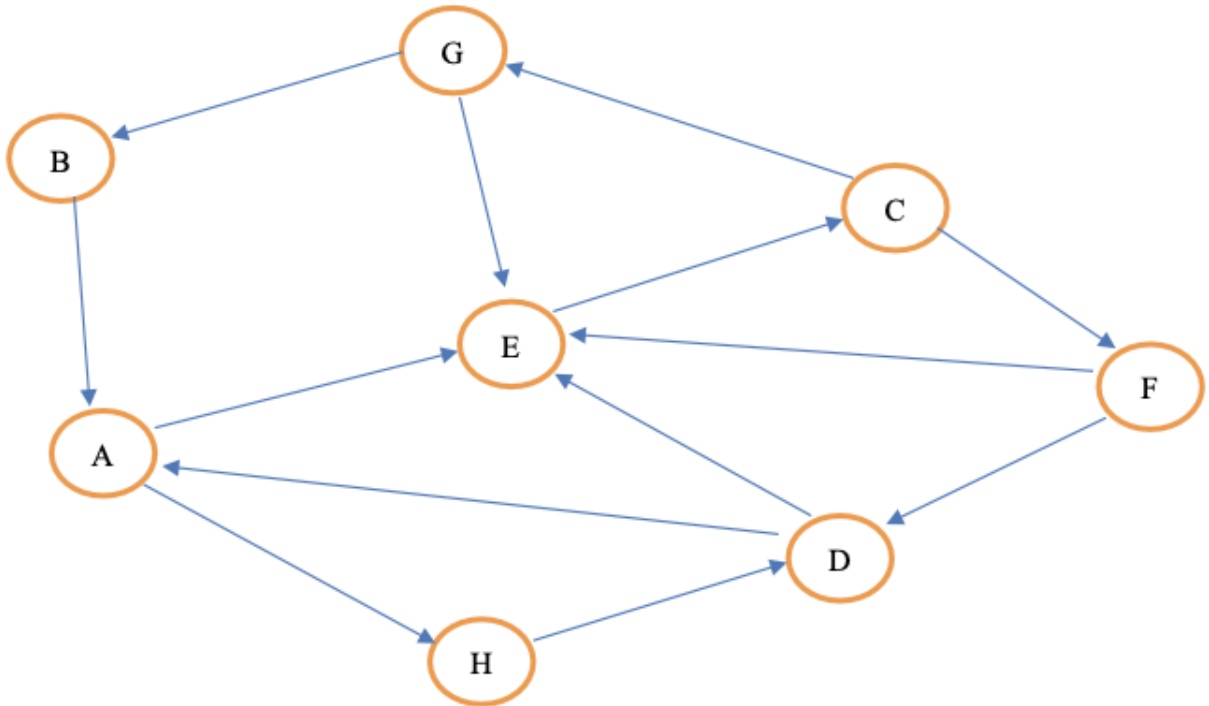


CSC6013 - Worksheet for Week 4

DFS - Depth First Search using the brute force algorithm as seen in class

Consider the graph below:



1) Represent this graph using an adjacency list. Arrange the neighbors of each vertex in alphabetical order.

- list the triplets for this graph in the form (A, B, 1), where there is a edge from vertex A to vertex B;
- Note that this graph is directed, unlike the one presented in class.

2) Trace the DFS execution by adapting the code to deal with a directed graph (remove lines 7 and 8) and instrumenting it to print every time a recursive call is made and a vertex is visited:

- Each time a recursive call is made for vertex A, print: "DFS called for vertex A";
- Each time a vertex A is visited print: "Vertex A visited and received the stamp <count>" and the current array V.