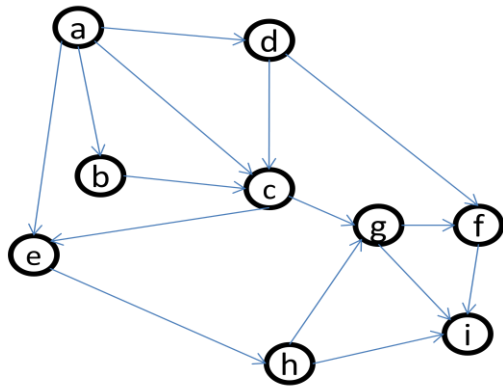


Cse332, Worksheet 6: Graphs

1. Using the following graph, execution the following algorithms. When evaluating edges, consider them in alphabetical order:
 - a. Topological sort: show work and the resulting order
 - b. Breadth-first search: start at 'a', and write the order visited
 - c. Depth-first search: start at 'a', and write the order visited



2.
 - a. In the previous graph, why would Topological sort fail if an edge from 'h' to 'd' were added?
 - b. Assuming we just want to traverse a graph, in any order, are there cases where Depth-first-search will fail to find a valid solution yet Breadth-first-search will succeed (Hint: yes). When?