Programming assignment 8.

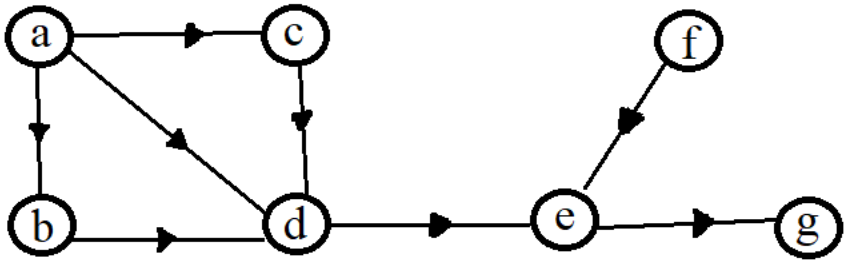
Due date: Wednesday, May 6, 2020 at 11:59pm

Note: you can have different names for vertices: {a b c d e ..} = {v1 v2 v3 v4 ..} = {1 2 3 4 ..}

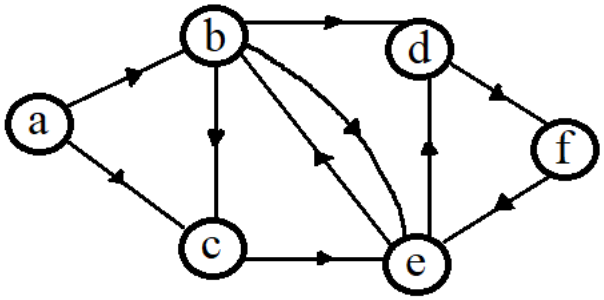
In this program you are required to implement DFS.

First, you can create the below graphs and print the resulting adjacency matrices/lists. Or create a random graph.

G_1



G_2



1. Run *DFS* function to check if the graph is a DAG (directed acyclic graph):
   - ✓ Search for backward edges. If there are any, (the graph has a cycle.)
     print: "Cycle detected, topological sort is impossible".
2. If the graph is DAG, (while running DFS):
   - ✓ Insert the vertex into a linked list as it finishes.
   - ✓ Using your linked list, print the topological order of the vertices along with their *start/finish time.*