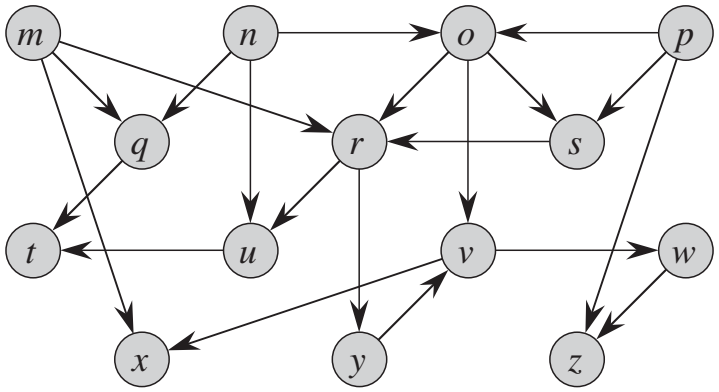
CSE 2331 - Problem Set 6
Due beginning of lecture on November 17th

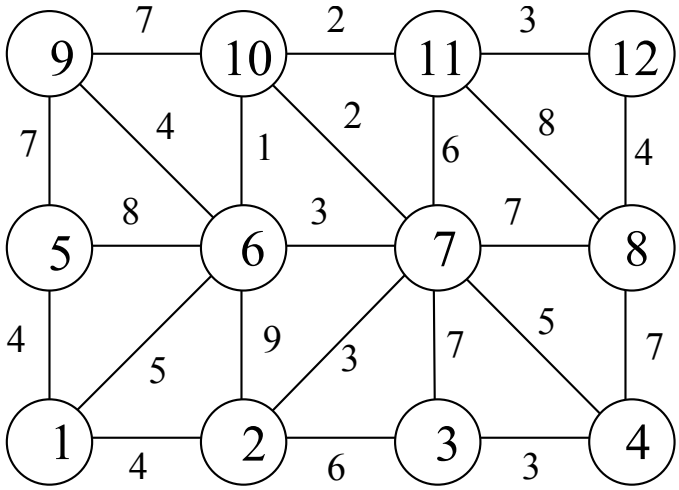
Problem numbers are from the third edition of "Introduction to algorithms". If unsure about which problem to solve, ask. Collaboration is permitted; looking for solutions from external sources (books, the web, etc.) is prohibited.

1. Show the ordering of vertices produced by topological sort when it is run on the following dag:



2. Consider the graph from problem 1. Suppose that the edge from t to p is added. Prove that the resulting graph cannot be topologically sorted.

3. Give the edges of the minimum weight spanning tree of the following weighted graph in the order they would be output by Prim's algorithm starting at vertex 1.



4. 24.3-1.