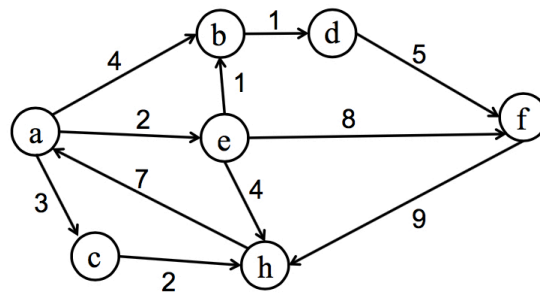# Homework 4

Due Date: 23:59, Thursday, 11/16/2016

1. Run Dijkstra's algorithm on the following directed graph and show the result of each step.
   (1) (30 points.) First, using vertex a as the source, show the shortest paths from the source vertex to every other vertex.
   (2) (30 points.) Then, using vertex e as the source, show the shortest paths from the source vertex to every other vertex.

2. (40 points.) Given the following flow graph, find a max-flow from s to t using Ford-Fulkerson algorithm and show each step of your process.