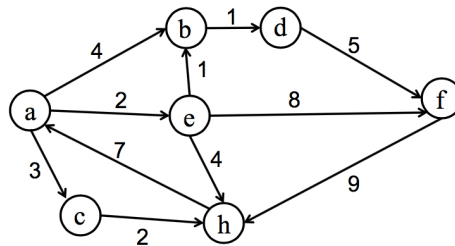


Homework 4

Due Date: 23:59, Monday, 07/19/2021

1. Run **Dijkstra's algorithm** on the following directed graph and show the result of each step.
 - (1) (35 points.) First, using vertex *a* as the source, show the shortest paths from the source vertex to every other vertex.
 - (2) (35 points.) Then, using vertex *e* as the source, show the shortest paths from the source vertex to every other vertex.



2. (30 points) Find a Minimum Spanning Tree for the following graph.

