

Honors Homework

For full credit, please adhere to the following:

- Unsupported answers receive no credit.
- All answers must be typed and readable.
- You must work independently and your submission must be your individual work.

All of the following questions are in the textbook for the course, *Discrete Mathematics with Applications (Fourth Edition)*, by Susanna Epp.

1. Read pp 710 - 714 in the course textbook and implement Dijkstra's Algorithm.

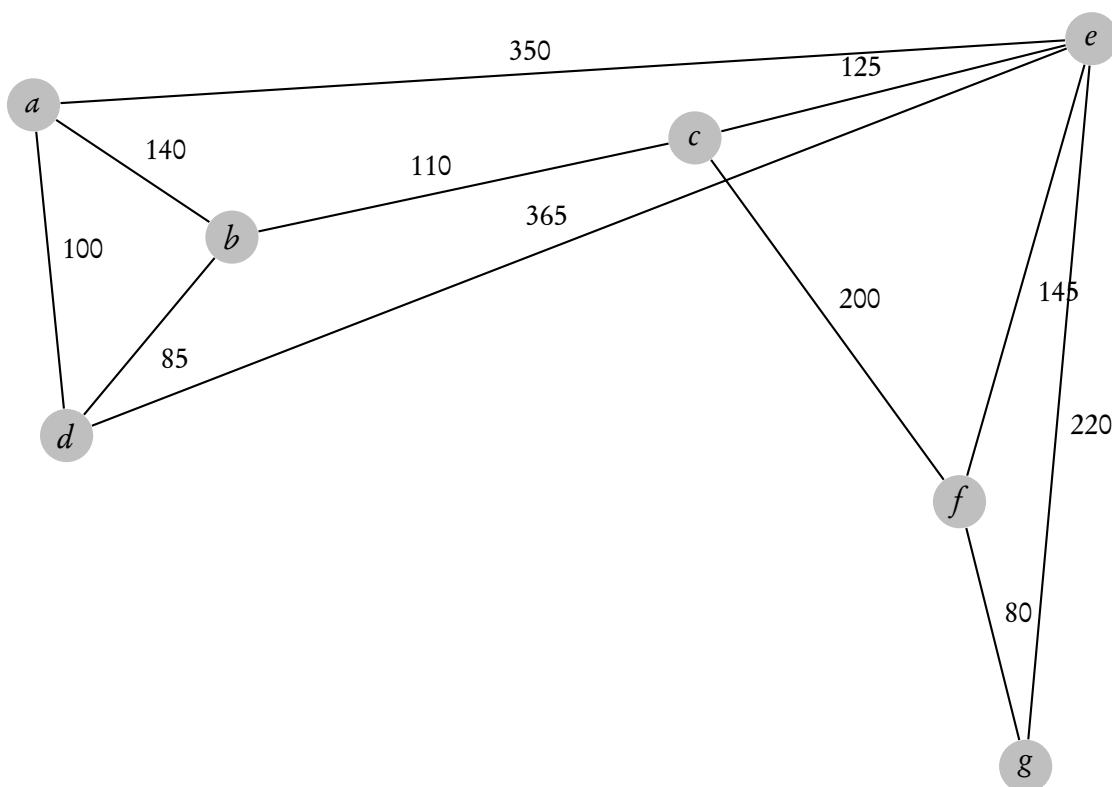


Figure 1: Map of flights between cities and their costs.

2. Consider the map in Figure 1 of flights between cities where the weights on the edges refer to the cost of the flight. The cities in the graph are:

- a. San Francisco
- b. Denver
- c. Chicago
- d. Los Angeles
- e. Boston
- f. Atlanta
- g. Orlando

Find the least expensive cost to fly from:

- Los Angeles to Boston
- San Francisco to Orlando
- Denver to Atlanta