CS 260 Homework 7

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1 7.1

```
graph[vertex1][vertex2] = cost  # initialized to infinity

def insert(graph,i,j,value):
        graph[i][j] = value
        graph[j][i] = value

def remove(graph, i, j)
        graph[i][j] = float("inf")
        graph[j][i] = float("inf")
```

2 7.2

The adjacency list could be stored as a graph where the two verteces are index's and the third value is the cost for that path.

```
delete(graph,i):
        graph[i][0] = float("inf")
```

3 7.3

A) F-H F-E F-G E-B D-C D-B B-A

B) C-D F-H E-G A-B B-D E-G F-G D-E

C,A) A-B B-D D-C D-E E-F F-H H-G

C,D) D-C C-A A-B D-E E-F F-H H-G

4 9.2

$a. log_2 n^2$
$b. log_2 n^3$

$c.log_2 n^6$