

CISC320 Algorithms, Homework set 3  
Due Wednesday, April 14, 2010  
Single Source Shortest Paths

1. Exercise 4.1, part (a). "Each iteration of the algorithm" means each iteration of the while loop.
2. Exercise 4.2
3. Exercise 4.4

On the first two exercises, make a table as in figure 4.14. The point of these "follow the algorithm" exercises is to deepen our understanding. So put a little thought into what you are getting. The result should be a couple of "aha" moments as well as a table.

On exercise 4.4, a small-as-possible counterexample with explanation will be sufficient and appreciated.

Extra credit: Do any other exercise of chapter 4. If you do this, put it on a separate page, handed in separately. First quote verbatim the exercise statement. Vis a vis grades, this counts toward the participation 5%.