Homework 6*

CS 719, Semester II, 1996-97

Friday February 28, 1997

The following three problems should be solved using GAMS and CPLEX. Make sure that you follow the instructions on the WEB page to set up your version of GAMS appropriately.

1. Solve the shortest path problem given in Figure 4.15(a) on page 127 of the class text. Make sure you find the shortest path from node 1 to all the other nodes. The data for the network in Figure 4.15(a) is given on the public directory in the file `fig415a.gms`. Update this file to formulate the shortest path problem for Figure 4.15(a) and solve.
2. Input the appropriate data for Figure 4.15(b) and solve this problem as well. You probably only need to update the input data from your solution to 1.
3. Solve problem 4.13 of the class text (page 127). The file `ex4-13.gms` on the public directory shows how I set up some sets in GAMS to help me solve the problem. Update this file (or create a completely different one) to solve the problem.

You should hand in a listing of the appropriate `gms` files and indicate (either in handwriting or by computer output) the solution you found. The solution will be in the appropriate `lst` file: don't print it all out - just the relevant part.

Note that these problems are not mathematically hard, but I guess that the GAMS syntax might prove baffling. Please come and see me or the TA whenever you have problems with such matters.

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*Homework due in class one week after assigned. No late homework accepted.