CMPS 5333 – Simulation

Homework #2 – ED Simulation Environment

Problems – text Chapter 4 starting on page 156
Due: Monday, Dec. 1 – class time (late work will not be accepted after Dec. 5)

Each problem will be graded separately, so please staple them as 2 separate assignments.

For each problem, run 3 times. Create a table with the results of the 3 runs AND the expected values (where applicable).

Print out the model with and without the channels. Rename the atoms to meaningful names. You may write on your printouts or use the text box to add labels. Print the default summary results. Indicate on the printout the consistency (or lack of) with ALL EXPECTED RESULTS. Indicate what each of the values in the summary tells us about the system. Graph one statistic from each problem. (Each graph must be a different statistic). Write a brief “summary to the client” stating your overall results and recommendations.

In addition to the questions asked in the problems, answer the following or add to/change the model as described below.

8 – Superhighway: Explain how you implemented the different numbers of passengers. Compare the number of vehicles of each type to the indicated percentages.

25 – Warehouse: Include a description of how you set up the filling of the warehouse in your model. Without regard to “fitting perfectly”, based on the arrival rates of the various sized cartons, what is the estimated time it takes for 1000 cubic feet of cartons to arrive? Compare the number of each type of carton to the expected number.