IE 312 Optimization

Project Requirements

The project will deal with one of the following problems from the textbook:

2-26, 2-36, 4-31, 4-37, 10-49, 11-35, 11-37, 11-39, 11-42, 11-43, 11-44

All of these problems are based on actual real-world applications that have been described in research papers. You need to select one of those problems, go to the library and find the relevant paper, and formulate and analyze the problem described.

The requirements for the project are as follows:

• Formulate the problem and justify the formulation (the assumptions).
• Model the problem in LINGO and solve.
• Make recommendations based on the LINGO solution. Make sure to give scenarios where appropriate and/or state how much confidence can be placed in your recommendations.

You will write up a final report with an executive summary, description of the problem, description of the model, solutions, and recommendations. Computer outputs may be included in an appendix.

You will also need to make a short oral presentation of your results in class during the last week of the semester.

The project should be done in small groups that will be assigned in class.