

Problem Set #5 (Algorithms)

Department: _____

Student ID: _____

Student Name: _____

For the following problems, consider the longest common subsequence (LCS) of two sequences.

1. For Prim's algorithm using the binary heap,
 - (a) Write the pseudocode and explain the pseudocode at least four lines.
 - (b) Analyze the time complexity mathematically.
 - (c) Write the program which includes the comments.
 - (d) Show the test results.
 - (e) Explain the program and the test results at least four lines.
2. For the heapsort,
 - (a) Write the pseudocode and explain the pseudocode at least four lines.
 - (b) Analyze the time complexity mathematically.
 - (c) Write the program which includes the comments.
 - (d) Show the test results.
 - (e) Explain the program and the test results at least four lines.