

## Problem Set #6 (Algorithms)

Department: \_\_\_\_\_

Student ID: \_\_\_\_\_

Student Name: \_\_\_\_\_

1. For Dijkstra'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 Bellman-Ford algorithm,
  - (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.