Socket Programming (100 points)

Requirements: You are required to write an Echo Client and an Echo Server program. The echo client communicates with the echo server using UDP. The programs should fulfill the following requirements:

#### Client:

- 1. Prompts the user for a line of input.
- 2. Sends the line to the server.
- Displays whatever the server sends back.
- 4. Displays an error message if the arguments in the command line are not valid.

#### Server

- 1. Receives the data from the client.
- 2. Echoes it back to the client.

#### Note:

- 1. Java language should be used.
- Do NOT hard code the server address and port number in your source code.
  The server address and port number should be set as command line arguments.
- 3. Your program should work under MS-DOS window.
- 4. You may get an extra credit if you add HTML in the front end of the client.

### **Deliverables:**

- 1. Java source files for the client program and server program
- 2. An "Instructions for Users" CLEARLY describing how to compile and run your client and server program.

## Marking Scheme:

- 1. Completeness (all required deliverables are included)
- 2. Correctness (the required items in the "requirements" section)
- 3. Documentation (descriptive in-line code comments)

# Notes:

- 1. This is group assignment. One team member need to submit the solution on behalf of the team. However, both team members need to demo the work in the class. Failure to demo the assignment will make you loss points.
- 2. Homework 2 is due by 08:59pm, November 12, 2018 (Monday). Late assignments are not accepted.
- 3. Lecture notes can be used as a starting point for the answers.