

## CS380 Lab Assignment – Client Server & Threads

### Client Server:

*(go through the provided client server reading material before you begin this part of the assignment)*

- 1) Port numbers below 1024 are well known; that is, they provide standard services. Port 17 is known as the *quote-of-the-day* service. When a client connects to port 17 on a server, the server responds with a quote for that day.

Create a server that delivers a quote of the day. Since port 17 is considered well known and therefore unavailable, have your server listen to port 6017. Create a client to read quotes returned by this server.

### Threads:

*(go through the provided threads reading material before you begin this part of the assignment)*

- 2) Write a multithreaded Java program that outputs even numbers. This program should work as follows: The program will prompt for input of an even number by the user (e.g. "Please enter an even number"). The program will then create a separate thread that outputs all the even numbers less than or equal to the number entered by the user. (You should use the Runnable Interface for this assignment).

### Assignment Submission Instructions:

Submit your completed assignment through Moodle. You should submit (1) a zip file containing your Java code for Part 1 of the assignment, (2) a zip file containing screenshots showing your code for Part 1 running (the output from running your code through e.g. Eclipse), (3) a zip file containing your Java code for Part 2 of the assignment, and (4) a zip file containing screenshots showing your code for Part 2 running (the output from running your code through e.g. Eclipse).

Note: you should include comments in your code (written in your own words) to explain what is happening at each part of your code. Before submitting your code ensure that it is well commented and formatted (marks will be deducted for code that is not well commented and formatted).

Assignment submission deadline is provided on Moodle. Penalties will be imposed on late submissions.