Assignment 2 : Transport Layer and Micro Servers Manual

1. Compile all java files in the folder by running the command **javac *.java**
2. Run all six micro servers on the command line after compilation named **Echo**, **Reverse**, **Upper**, **Lower**, **Caesar** and **CapitalizeVowels**. All of the micro servers listed about run on port 7001, 7002, 7003, 7004, 7005, and 7006 respectively.
3. After successfully running the micro servers, you will then run the **MasterServer**.
4. After running **MasterServer** you will then run the **Client** using this command
   java Client localhost 7700
5. When they have successfully run both, you will see the prompt on the **Client** screen "**Enter your message:**". You may enter any message you would like, but once you enter in your message, you will not have the option to change it, unless you rerun the **MasterServer** and **Client** programs.
6. Once you have entered in your message, you will be given the following two options "**1 - Enter a command**" or "**0 – Exit program**". Choosing option 1 will give you a list of numerical commands that you can perform on the message that you sent.
7. **Commands List**
   Command 1 "**Echo Message**" will return the message that you originally sent, without any modifications
   Command 2 "**Reverse Message**" will return the message in reverse order.
   Command 3 "**Uppercase Message**" will return the message capitalized.
   Command 4 "**Lowercase Message**" will return the message lowercased.
   Command 5 "**Caesar Message**" will return the message with a Caesar cipher applied to all alphabetic symbols, with an fixed offset of 2.
   Command 6 "**Capitalize Vowels Message**" will return the message with all vowels in the string capitalized.
8. You can combine any of the commands as you choose, and the appropriate transformations will take place.
9. The user will be prompted each time after successfully completing a command, to exit the program if they choose so, or continue to enter commands to make transformations to their original message.
10. Testing for this program was performed using **localhost,** but can be run on CPSC Machines if the user wishes to do so.