You should save/rename this document using the naming convention LabX-MUid.docx (example: Lab2-johnsok9.docx).

**Objective**: The objective of this exercise is to:

- 1. Working with Git
- 2. Working with sockets
- 3. Basic I/O operations in java

**Submit**: working java program

You may discuss this with your fellow students or the instructor.

Name:

### Part #1: Gitlab

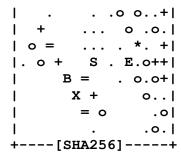
Estimated time: 30 minutes

**Exercise:** This will use git to clone the given source code.

Complete this part of the exercise via the following steps:

#### **Step1 Prepare Git**

- 1. Sign into gitlab at <a href="https://gitlab.csi.miamioh.edu/users/sign\_in">https://gitlab.csi.miamioh.edu/users/sign\_in</a> using your miami uniqueid and password, verifying your account is ready. Stay logged in.
- 2. Log into the ceclinux machine using ssh
- 3. From the command line type
  - a. ssh-keygen -t ed25519 -C "MUID@miamioh.edu" (replace MUID with your uniqueld)
  - b. Will output the following (MUID will be your unique ID): (HIT ENTER UNTIL PROMPT SHOWS BACK UP)



- 4. Display the public created key with:
  - i. cat ~/.ssh/id\_ed25519.pub
- 5. Copy the key by highlighting the output of cat with the mouse
- 6. Switch back to Gitlab on browser
- 7. Click on top right menu item and select Profile
- 8. Now click on the pencil at the top right to edit the profile
- 9. Select SSH Keys on the left menu
- 10. Paste the copied public key into the key box on the right , then press "Add Key"

## Step 2 Clone the source code (verifies if step1 is correct)

Create a classroom structure in your ceclnx01 system

- 1. cd
- 2. mkdir cse383 (if it doesn't already exist)
- 3. cd cse383
- 4. mkdir lab2
- 5. cd lab2
- 6. git clone git@gitlab.csi.miamioh.edu:johnsok9/cse-383-sockets.git (note: use johnsok9 not your muid here)
- 7. Note: you should be working in your ~/cse383/lab2/cse-383-sockets directory
- 8. Compile the socket program
  - a. javac socketClient.java
  - b. (should return with NO errors)

# Part #2: Modify Code, Test and Submit

Estimated time: 30 minutes

# Background

## **Exercise:**

- The code you have just downloaded compiles but is not quite ready for the initial test.
- You need to update it using a text editor, then compile, run and verify
  - o Edit (nano or vim)
  - o javac socketClient.java to compile
  - o java socketClient to run

- 1. Edit the file socketClient.java
  - a. Find every section with TODO1 and update it (including the top header)
    - Host/IP Address="184.58.68.186"
    - Port = 5002
    - MUID = your MUID
- 2. Compile the code
  - a. javac socketClient.java
- 3. Test the program
  - a. java socketClient
  - b. Should display:

**Success** 

**Greeting => Hello** 

### **SUBMIT:**

- Submit the working java program
- Screen Grabs
  - o Java compile showing program compiles with no errors
  - o Java run shows program runs (including command line executed) correctly
  - o Git Web setup Show screen grab from git assignment
  - Git clone worked
    - Screen grab showing output of "ls -l" command with all files in the ~/cse383/lab2 directory