Assembly Programming Setup

Reminder: You only need to follow these steps if the VM installation was unsuccessful or you do not want to install any software on your computer. These instructions assume that you are going to be doing all your work on the Math/CS computers by either working on a computer in the lab or remotely accessing a lab computer.

This document details the required setup you need to complete in order to use the `as255` and `m68000` programs for this course. The “Setting PATH variables” section will only need to be completed once per semester.

Log-in:
The `m68000` program (EGTAPI) is only available on the Math/CS lab computers. In order to complete projects with `m68000` (EGTAPI), you must login remotely to `lab0z.mathcs.emory.edu` (if working remotely) or any of the lab machines (in person) using your Emory user ID and password.

If you wish to work from your laptop (running either Windows or OSX) in your dorm or apartment, you will need to follow these instructions for remote access to the Math/CS systems.

Setting PATH Variables:

- Before you can use the `m68000` simulator, you must set up the PATH variable to include the `as255` and `m68000` programs.

After you are logged into lab0z, execute the following command at the UNIX command prompt:

```
~cs255000/bin/add.path
```

Logout and log back in. Now you should be able to use the `as255` and `m68000` commands. To verify, type these command after you log back in:

```
>> type as255
>> type m68000
```

You should get as answers: `/home/cs255000/bin/as255` and `/home/cs255000/bin/m68000`. If you get a "not found" message for any of the above, let Dr. Summet know or come to office hours.

Testing your Setup:

To test your setup, copy a small assembler program, assemble it, and load EGTAPI. Issue the following commands in your terminal window:

```
cd cs255; mkdir test; cd test  # Make a testing directory and cd to it
cp -cs255000/share/demo/abc.s  # Copy a testing file
as255 abc                      # If this is successful, you won't see any output; if you see errors, there are problems
m68000 &                       # If a window appears, your setup was successful and you're ready to work.
```