The agent.c file was supplied and not modified. The server.c file requires the user to type in the desired port of the server. I did this because, when running it on the Texas State Linux server, other students would accidentally use the same one I am using, and this makes it faster to change. The file creates a file descriptor with a socket. It then binds the port and IP into the file descriptor. If both of them were successful it then listens and accepts agents action as long as it does not exceed the server buffer size. At the end it returns a file descriptor and then it gets deleted.

It takes all 4 commands, however they have to be wrapped with quotation marks.

For example:

./agent zeus.cs.txstate.edu 8080 “#JOIN”

To compile the server use the following command:

gcc server.c -o server

To run the server:

./server 8080

8080 is just an example of a port, you can pick whichever you desired.

I was not able to test the program with 3 machines, the agents socket always failed to connect even when using Linux distributions, subsystems, virtual machines, and much more. I believe it has to do with some setting in my network router.



This is an example of the issue I was having.

But using the Texas State Linux servers, I was able to test my program

