

# CN Homework 1 Report

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## Program structure

I use python's socket API to connect to the IRC server, and send / receive messages to / from the IRC server according to the IRC protocol.

My program is actually just a 'while (True)' loop which keeps reading from the socket and sending messages back. For example, if I see a message that starts with the string "@repeat" then my program will echo the rest of the message back. If I see "@cal" then I evaluate the rest of the message as an arithmetic expression and return the result.

## Challenge and solution

I consult this document (<https://tools.ietf.org/html/rfc1459>) to implement the IRC protocol.

For the calculator part of the program, I found it hard to implement with python, so I wrote a calculator co-routine with C instead. The co-routine is used to evaluate arithmetic expressions.

## Reflections about this homework

This assignment is actually pretty fun.