Sockets:

**Client side socket establishment:**

Create a socket: socket()

Connect socket to address of server: connect()

Send and receive data: read() and write()

**Server side socket establishment:**

Create a socket: socket()

Bind socket to address: bind()

Listen for connections: listen()

Accept a connection: accept()

Send and receive data: read() and write()

**Socket Types:**

Stream sockets and Datagram sockets:

* Stream sockets: communications are treated as continuous stream of characters
* Datagram sockets: read entire messages at once

Datagram:

* Use recvfrom instead of listen.

Select:

* Takes in number of file descriptors, a read file descriptor set, a write file descriptor set, an except file descriptor set, and a timer.
* ~~ !Select is MAGICAL! ~~
* Need to keep a backup set of your file descriptors, because you need to reset the file descriptors every time you select.

Poll:

* Takes in a poll file descriptor struct, a number of file descriptors and a timer
* Pollin to read data
* Pollout to write data