

Purpose: To use some of the advanced socket I/O capabilities.

You will build an upgraded TCP time client. You will call your client `ATCPtimec.c`. It will be an upgrade of the `TCPtime.c` client you built for your homework.

As in your homework you will be using my server so, the default service should be "5001", and the default host should be "panther".

Remember, the **panther** server is perverse and it will try to break up the reads and it will occasionally drop the connection.

Client Upgrades:

- 1) After setting up the socket, but before the read/reassemble loop, the client should print the size of the socket's send and receive buffers.
- 2) Also before the read/reassemble loop; set up the socket to be asynchronous (non-blocking).
- 3) Inside the read/reassemble loop; if the read gets an error of **EAGAIN** you should (a) print an **X** (b) sleep for a second (c) retry the read

Note: if the result of the read is `==0` (before you get 4 bytes) or the error is not **EAGAIN**; the server has lost or dropped the connection and you should exit without printing the time.

Expected client behavior: When the server pauses in the middle of sending you the number you should see an **X** or two come out. The time you print should still be valid.

Submit: a printout of your `ATCPtimec.c` file.

A copy of this file must be located in your class home directory; and have the name above.