

**Due: Nov 28th, 2016**

- This program is a simulation of the Transmission Control Protocol (TCP).
- The simulation consists of:
  - Client initiates the 3-way handshake.
  - Server sends the date string
  - Client sends an acknowledgement and then a FIN to start the connection close.

We will test against each other so please review the TCP RFC and make your own (correct😊) interpretation.

Information about TCP is available at <http://www.ietf.org/rfc/rfc0793.txt>

Additionally:

- Add a signal handler on the server so a Ctrl-C on the client does not do anything to the server. Most of your servers that you submitted in the previous homework will die if the client terminates. (TRY IT!). You still need a way to kill the server!
- Set a 5 second timer on the server to retransmit the date string if the ACK is not received from the client.
- Set up a random number generator on the client so that 50% of the time, the client will ignore the date string from the server.
- Initial sequence numbers should be generated randomly just like the real TCP.

**LOOK AT THIS HOMEWORK BEFORE TUESDAY AND ASK QUESTIONS IN CLASS!**

**Submit: Source code, makefile, output**