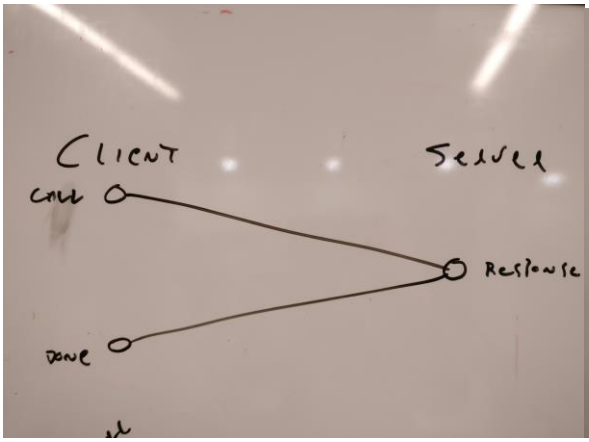
431 Assignment 1 | Rohm Laxton, Korban Torsun

Q1. Why is the assumption, that the delay from the server to the client is one half the RTT, not generally correct? Give two reasons.

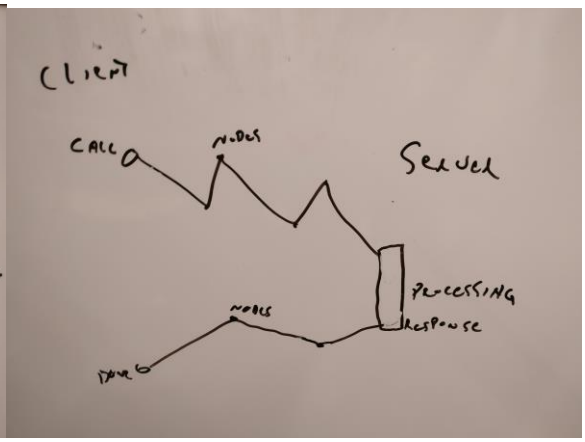
Q1.1. The path taken for messages from the server to client most likely will not be the same as the path taken for messages from the client to server. Any different between them will add or subtract time from the messages.

Q1.2. The message may require processing on the server or potentially the client that has not been accounted for.

Base example:



Real example with above:



Q3. If the client does not receive a response form the server, what could be wrong? List two things that could be wrong, and explain how your program can cope with them gracefully; i.e., not just hang. There is no need to actually program your answer; just explain your approach.

Q3.1. Network disruption caused a message to be lost. Timeout on the response would handle this, whether the timeout.

Q3.2. Server down. Likewise a timeout would handle this in a similar method, alternatively a heartbeat message from the server would be a way to keep track of server status for the clients.