1. **Team details: Clearly state the names and netids of your team members (there are 2 of you).**
Justin Kwok/jdk179, Anirudh Rao/ar1637.

2. **Collaboration: Who did you collaborate with on this project? What resources and references did you consult? Please also specify on what aspect of the project you collaborated or consulted.**
It was only the two of us that collaborated, however we asked TAs during office hours for assistance.

3. **Discuss how you implemented the RS functionality that tracks which TS responded to a given query or timing out if neither TS responded. Please be clear and specific.**
First, client.py sends the current query to RS, which is connected to 2 client sockets and 1 server socket. RS then sends the query to both of the client sockets and uses select() to poll both sockets. If select returns that one of the sockets has data waiting to be received, it receives it from the returning socket and sends it to client.py. If select shows that no socket has data waiting to be received after 5 seconds, it returns "Domain name - TIMED OUT" to client.py.

4. **Is there any portion of your code that does not work as required in the description above? Please explain.**
We couldn't find an easy way for TS1, TS2, and RS to break out of their process loops. Client will exit and end the program once it finishes. RS will proceed for a couple extra seconds before throwing ERRNo 32 - Broken Pipe (by that point, it will have already sent the results of all the queries to Client). Once that happens, TS1 and TS2 will then proceed to exit.

5. **Did you encounter any difficulties? If so, explain.**
Yes, we first ran into difficulty figuring out what the algorithm meant when it was supposed to be recursive because RS needed to query both TS1 and TS2. With some help from the TA, we overcame this. For the project itself we had trouble connecting the keys with the queries, since the keys were strings while the queries were unicodes.

6. **What did you learn from working on this project? Add any interesting observations not otherwise covered in the questions above. Be specific and technical in your response. Contact the course staff on Piazza if you have any questions.**

We further developed our Python skills and learned more about dictionaries and queries. In addition, we learned how to have one program connect to multiple sockets as well as the usage of select for monitoring output.