CIS 505 - Project 2

Milestone 1

There are 7 client functions in my TCP and UDP:

How to run my program:

run make on both the folders.

7 of my clients work as follows:

1. changepassword(): it enables the admin to change the password of the server. You should use standard input instead of command line arguments to ask for current username and password, and should allow to change the password only if the entered information is correct. The username can just be considered as a name for the server, hence we are not interested in changing that. Return TRUE if successful, FALSE otherwise.
2. zeroize(), which sets or resets the system to an initial state, with no candidates, no voters, and zero votes. Return “zeroize\_successful” if successful.
3. addvoter(int voterid), which adds the voterid to a list of authorized voters. Return OK1 if successful first time add and OK2 if added after 1st node in linked list, EXISTS if the voterid is already present in the system, and ERROR if there's any error.
4. votefor(char \*name, int voterid), which adds one vote to the total vote count of the candidate referred to by name if the voterid has not already voted. If the named candidate is not already present in the system, add the candidate to the system with a vote count of 1. Else, if the candidate is already present in the system, increment his or her vote count by 1. Return EXISTS if the candidate exists and was successfully voted for, NEW if the candidate didn't exist previously and was successfully voted for, NOTAVOTER if voterid is not in the list of authorized voters, ALREADYVOTED if the voterid had already voted.
5. listcandidates(), which returns a list of candidates currently with votes (but not their vote totals).
6. votecount(char \*name), which returns the integer vote total for the candidate referred to by name, or -1 if the candidate isn't in the system.
7. viewresult(char \*username, char \*password), which returns the list of candidates with their vote count and also declare the winner/tie/null(for no candidate) from the server and shuts down the server so that no new votes can be added. The processing of the result should be done on the server side. The client program should be able to view the results only if the username and password, passed as arguments, match with the current admin credentials of the server. Return the list if successful, else return UNAUTHORIZED or ERROR if there’s any error.