

Programming Guide : Homework 1

This is a quick guide how to start your homework 1 with a given skeleton code of a client program. The objective of the skeleton is to let students focus on socket programming, and also to evaluate your homework fairly by having the same skeleton. The skeleton has been implemented almost everything except codes related to the socket programming.

1. Skeleton consists of :

- **crc.c**

There is a main function that already has been implemented. You don't have to modify the main, but you need to understand what main function does so that you fill your own code in the skeleton. Also, there are three functions that have not been implemented yet. Your job is implementing these three functions.

- **Interface.h**

It contains functions that main function uses and Reply (user defined structure) that you will use in a *process_command* function. You don't have to modify this file.

2. Implement three functions:

- *int connect_to(const char *host, const int port);*
- *struct Reply process_command(const int sockfd, char* command);*
- *void process_chatmode(const char* host, const int port);*

There are descriptions about these functions in the skeleton. Please read the description carefully and observe the guides.

3. Do not print anything on the screen.

The skeleton does print everything on screen for you to interact with a user. What you need to do is use *get_message* function to get a message from a user during chatting and *display_message* function to print messages from other members in a chat room.

You can print some debugging information during the development phase, but you must erase them when you submit your homework.

5. Test your program with given test cases

There are five test cases that covers most scenarios of homework 1. You can see test cases and its results in the provided excel file. Before test each test cases, restart your server/client program to have the same output with the given output in the excel file. Evaluation will be done with different test cases.

6. Contact TA if you have any questions