Part 1: server (important functions and features)

Struct users:

it is used to categorize each user's channel name,token,username and existence in any channel.

Struct channels:

```
struct users
{
    char username[100];
    char token[20];
    int existinchannel;//it should be 0 or 1
    char channelname[100];
};
```

it only contains channels names to facilitate checking their existence.

Int usercounter:

It contains number of all online users and it is mostly used to check tokens and comparing them witheachother

Login and registerr functions:

```
void login();
void registerr();
```

In these functions username and password became separate from each other because they where in one string which is called buffer.

Garbage string:

```
sscanf(buffer,"%s %s %s",garbage,garbageusername,password);
    garbageusername[strlen(garbageusername)-1]='\0';
    strcpy(username,garbageusername);
```

It is used for eliminating unwanted words.

Join and create channel functions:

```
void create_channel();
```

```
void join_channel();
```

In these functions the token which is given by client is being compared with all online users tokens and because of that we call it test token.

Channel menu:

Send message:

```
void send_message();
```

In this function the word "send" is known as a garbage string and 5'th till lengthofstring -19 is the message we send to the server and we try to separate token with the message char by char.

Show members :

```
void channel_members();
```

We have cJSONArrey and we add each user with exists in the channel by checking their tokens and finding their channel's name.

Refresh:

```
void refresh();
```

In this function we send a result string which should contain all messages sent by users and set in an arrey in an item which is called contact.

Part2:client

All functions in this code is exactly like server's functions but they just do the reverse.new strings are become made

And then they are sent then we use memset to make it empty then we receive server's response to our request.

There aren't many difference in names of functions which are used but the difference is just in their reverse job(answering or building message)