

Exp# 5c**Chat Messaging****Aim**

To exchange message between server and client using message queue.

AlgorithmServer

1. Decalre a structure *mesgq* with *type* and *text* fields.
2. Initialize *key* to 2013 (some random value).
3. Create a message queue using *msgget* with *key* & *IPC_CREAT* as parameter.
 - a. If message queue cannot be created then stop.
4. Initialize the message *type* member of *mesgq* to 1.
5. Do the following until user types Ctrl+D
 - a. Get message from the user and store it in *text* member.
 - b. Delete the newline character in *text* member.
 - c. Place message on the queue using *msgsend* for the client to read.
 - d. Retrieve the response message from the client using *msgrcv* function
 - e. Display the *text* contents.
6. Remove message queue from the system using *msgctl* with *IPC_RMID* as parameter.
7. Stop

Client

1. Decalre a structure *mesgq* with *type* and *text* fields.
2. Initialize *key* to 2013 (same value as in server).
3. Open the message queue using *msgget* with *key* as parameter.
 - a. If message queue cannot be opened then stop.
4. Do while the message queue exists
 - a. Retrieve the response message from the server using *msgrcv* function
 - b. Display the *text* contents.
 - c. Get message from the user and store it in *text* member.
 - d. Delete the newline character in *text* member.
 - e. Place message on the queue using *msgsend* for the server to read.
5. Print "Server Disconnected".
6. Stop

Result

Thus chat session between client and server was done using message queue.