

Lab Sheet 4

1. (a) Write a program to implement UNIX daytime client (both TCP and UDP versions). Test your client program with the daytime server already running on your machine.

(b) Now write your own daytime server and test your client with it.
2. Implement a chat server for the following scenario:

A chat server is an application that enables conversation between multiple chat clients. It maintains a set of chat rooms / groups. Chat clients connect to the chat server and make a request to join a group. The chat server may reject the request if the number of clients already in the group exceeds the maximum allowed in that group. If the request is accepted, that client is made part of the group. All the clients that are part of a group receive all the messages transmitted by any member of the group. The chat server facilitates this group communication. A chat client reads the text typed by a user and sends it to the chat server. It is the responsibility of the chat server to relay that message to all other members of the corresponding group.