Indian Institute of Information Technology, Allahabad.
Course: Computer Networks (ICNW532)
Batch: B.Tech (ECE), (Dual Degree Integrated Program) and MBA (IT)
Instructor: Dr. Vijay Kumar Chaurasiya

Lab Assignment #3
Lab Sessions on 27/10/2017
Deadline: 27/10/2017

1. (Simple File Transfer) Write a client server application in which client request a file to server and server send requested file to client using stream socket. Design a suitable protocol for message exchange as above as suggested in the Assignment #2, so that client and server can communicate efficiently and server can ask different option to the client.

2. Write a concurrent server application in which multiple clients can request files to server and server send requested file to client using stream socket. Design a suitable protocol for message exchange as above as suggested in the Assignment #2, so that client and server can communicate efficiently and server can ask different option to the client. (Hint: Use fork() system call).

3. Write a client-server program that provides chat facility. Your application allows a user on one machine to type in and send text to a user on another machine using stream socket. Your application should provide non blocking chat facility to the users. This means, user can send its message at any time without waiting for replay from the other side. (Hint: Use select() system call)

4. Write a client-server program that provides voice chat facility using datagram socket. Your application allows a user on one machine to talk to a user on another machine. Your application should provide non blocking chat facility to the users. This means, user can send its message at any time without waiting for replay from the other side. (Hint: Use fork() system call).