

Indian Institute of Information Technology, Allahabad

Course: Computer Networks

Batch: B. Tech. (IT) – 4th Semester

Lab Assignment #5

Deadline: 26/03/2024

Instructor: Dr. Vijay K. Chaurasiya

Note: Implement the programs in C and Python.

1. Write a client-server program using stream socket that provides file transfer facility. Your client allows a user to request a file from the server. On request the server transfer the file to the client. The client process needs to create a file and store the data received through the client socket thereafter close the file. You may utilize the following call to realize the above problem: **open(), creat(), read(), write()**

Usage:

`$/a.out [server_address] [port_number] [file_name.txt]`

Where server_address: IP address of the server.

Port_number: is the port number of the server socket.

file_name.txt is the name of requested file.

receive.txt is the name of the file in which client store the received file.

2. Implement concurrent server for the above FTP application. A concurrent server is a server which can serve any number of clients concurrently. You may utilize the following call to realize the above problem:
 - **fork()**