



SIDDAGANGA INSTITUTE OF TECHNOLOGY, TUMKUR-03

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

NETWORK PROGRAMMING LAB (7CSL01)

Program No.		Date:		
Student Name:		USN:		Batch No:
Evaluation:				
Observation writing and File maintenance (10 Marks)	Clarity in concepts (05 Marks)	Implementation and execution of the program (10 Marks)	Viva (10 Marks)	Total (35 Marks)
Sl.No	Name of the Faculty In-Charge			Signature
1.				
2.				

Question No. 4

Using FIFOs as IPC, write a client – server program, the client sends the file name and the server sends back the requested text file if present.

Pre-requisite

A FIFO (or named pipe) is a special kind of file on the local storage which allows two or more processes to communicate with each other by reading/writing to/from this file.

A FIFO special file is entered into the filesystem by calling *mkfifo()* in C. Once we have created a FIFO special file in this way, any process can open it for reading or writing, in the same way as an ordinary file. However, it has to be open at both ends simultaneously before you can proceed to do any input or output operations on it.

Server FIFO:

1. Open FIFO file-1 in read only mode and FIFO file-2 in write only mode.
2. Read text file name shared by client from FIFO file-1.
3. Open text file in read only mode.
4. Copy content of text file in FIFO file-2.
5. Close all the files.

Client FIFO:

1. Open FIFO file-1 in write only mode and FIFO file-2 in read only mode.
2. Write text file name in FIFO file-2(sending file name to server).
3. Read content of FIFO file-2 and send to stdout.
4. Close all the files.