Programming Tools II LAB

ASSIGNMENT WEEK # 4

1. Use **FIFO / named pipe** to establish communication between two different processes – client and server. The client and server communicate with each other using two different FIFOs to establish two way communication. The client process sends a *<file-name>* of a file residing on the server, using a FIFO. The server fetches the *<file-name>* from that FIFO, reads the contents of the file and then writes the contents read back to the client process using another FIFO. Finally the client displays the content receieved from the server on its terminal.

2. Redirecting Output: "ls -l | sort"
Use **FIFO** to develop a program where one process will execute "ls -l" and the output of the command will act as input for other process which will execute "sort" on it.

3. Write a program to implement Echo Service between multiple clients and a server using **named pipes.**
The server uses a well known FIFO to communicate with the clients. Each client maintains its own FIFO for receiving content from the server. The clients will write chunks of data (a string) to the server using the well known FIFO. The server will then echo the string back to the clients using the individual FIFOs maintained by the clients.