LAB ACTIVITY 11 - SOCKET PROGRAMMING

Fri, 19 November, 2021. Lab Activity Deadline: 5 pm.

What is a socket?

- Function: communicate between 2 different processes/2 different machines
- Bound to a port number
- Used in client-server application framework

Server

- Stores data, models and executes operations that it returns to multiple clients
- Runs on a specific computer and has a socket that is bound to a specific port number
- Waits, listening to the socket for a client to make a connection request
-
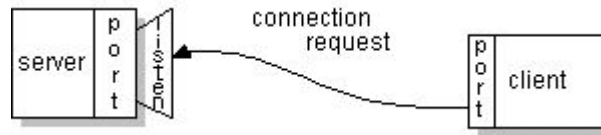
Client

- Makes a connection request using server machine and port
- To identify itself to the server, binds itself to a local port number
- Each time the server accepts a connection request, it gets a new socket bound to the client's local port
- Server and client communicate by reading and writing to the same port

About TCP(Transfer Control Protocol)

- Simple functionality and used in time non critical operations
- High data integrity - arranges the data in the order in which it was sent
- Provides congestion control
- TCP requires three packets to set up a socket connection, before any user data can be sent
- Error recovery possible.
- Unlike UDP because of lower speed, data integrity, 2 side communication and error detection