# Advanced C Programming

# Module - 4: Socket Programming

Qn 1) Explain the connection procedure followed by the client server communication.

There are two types of connection between a client and a server.

### 1. TCP 2. UDP

In TCP connection, there is a dedicated link between the client and server for the transfer of packets. But in UDP connection, there is no dedicated link between them. The packets can flow through any link.

- Step 1: the client initiates the request to the server
- Step 2: Server receives the request
- Step 3: Server decides whether to accept or reject the request.
- Step 4: If server accepts the request, server generates the response.
- Step 5: It then, sends the response to the client.
- Step 6: Client then receives the response and then process the data.

#### Qn 2) What is the use of bind() function in socket programming

The bind() function is used to attach the IP address and Port number to the socket that was created earlier.

# Qn 3) What is a Datagram Socket?

A datagram is a unit of transmission specifically used for UDP connection cases. These are discrete packets which contain the data as well as the IP and port details of the destination.

Similarly, a datagram socket is a communication endpoint that allows machine to send and receive datagrams.