**SIMPLE TCP/IP CLIENT SERVER COMMUNICATION**

**GIVEN REQUIREMENTS:**

There are two hosts, Client and Server. The Client accepts the message from the user and sends it to the Server. The Server receives the message and prints it.

**TECHNICAL OBJECTIVE:**

To implement a simple TCP Client-Server application , where the Client on establishing a connection with the Server, sends a string to the Server. The Server reads the String and prints it.

**METHODOLOGY:**

**Server:**

* Include the necessary header files.
* Create a socket using socket function with family AF\_INET, type as SOCK\_STREAM.
* Initialize server address to 0 using the bzero function.
* Assign the sin\_family to AF\_INET, sin\_addr to INADDR\_ANY, sin\_port to a dynamically assigned port number.
* Bind the local host address to socket using the bind function.
* Listen on the socket for connection request from the client.
* Accept connection request from the client using accept function.
* Within an infinite loop, using the recv function receive message from the client and print it on the console.

**Client:**

* Include the necessary header files.
* Create a socket using socket function with family AF\_INET, type as SOCK\_STREAM.
* Initialize server address to 0 using the bzero function.
* Assign the sin\_family to AF\_INET.
* Get the server IP address and port number from the console.
* Using gethostbyname function assign it to a hostent structure, and assign it to sin\_addr of the server address structure.
* Request a connection from the server using the connect function.
* Within an infinite loop, read message from the console and send the message to the server using the send function.