Experiment -2

Aim: -To implement and list the functions and methods used in TCP client/server program.

Methods used:-

1. Bind (): -The **bind function** assigns a local protocol address to a **socket**. With the Internet protocols, the protocol address is the combination of either a 32-bit IPv4 address or a 128-bit IPv6 address, along with a 16-bit TCP or UDP port number. This **function** is called by TCP server only.
2. Listen():-The **listen**() **function** marks a connection-mode **socket** (for **example**, those of type SOCK\_STREAM), specified by the **socket** argument s, as accepting connections, and limits the number of outstanding connections in the **socket's listen** queue to the value specified by the backlog argument.
3. Recv ():-The recv () function shall receive a message from a connection-**mode** or connectionless-**mode** socket. It is normally used with connected sockets because it does not permit the application to retrieve the source address of received data. Specifies the socket file descriptor.
4. Decode (): - Decodes the message received from the client.
5. Send ():-Sends the message from client to server or vice versa.
6. Close ():- Closes the connection made during the socket programming.
7. Connect (): Connects the address with the port address of the client.
8. Print ():- Prints the message sent by the client or the server .
9. Socket ():- Describes what kind of protocol we are using , TCP ,UDP ,ipV4 or ipv6 etc.

RESULT : - The methods used were successfully understood.