B.CHAT

AIM:

To implement a CHAT application using TCP Socket.

Concept:

1. It uses TCP socket communication .We have a server as well as a client.

2. Both can be run in the same machine or different machines. If both are running in the machine, the address to be given at the client side is local host address.

3. If both are running in different machines, then in the client side we need to specify the ip address of machine in which server application is running.

Program:

Chatserver.java:

```
import java.net.*;

import java.io.*;


public class  chatserver
{
        public static void main(String args[]) throws Exception
        {
                ServerSocket ss=new ServerSocket(2000);

                Socket sk=ss.accept();

                BufferedReader cin=new BufferedReader(new
InputStreamReader(sk.getInputStream()));

                PrintStream cout=new PrintStream(sk.getOutputStream());

                BufferedReader stdin=new BufferedReader(new InputStreamReader(System.in));

                String s;

                while (  true )

                {

                        s=cin.readLine();

                        if (s.equalsIgnoreCase("END"))

                        {

                                cout.println("BYE");
```

```java
                                break;
                        }
                        System. out.print("Client : "+s+"\n");
                        System.out.print("Server : ");
                        s=stdin.readLine();
                        cout.println(s);
                }
                ss.close();
                sk.close();
                cin.close();
                cout.close();
                stdin.close();
        }
}
```

Chatclient.java

```java
import java.net.*;
import java.io.*;
public class  chatclient
{
        public static void main(String args[]) throws Exception
        {
                Socket sk=new Socket("127.0.0.1",2000);
                BufferedReader sin=new BufferedReader(new
InputStreamReader(sk.getInputStream()));
                PrintStream sout=new PrintStream(sk.getOutputStream());
                BufferedReader stdin=new BufferedReader(new InputStreamReader(System.in));
                String s;
                while (  true )
                {
                        System.out.print("Client : ");
                        s=stdin.readLine();
```

```
                    sout.println(s);

                    s=sin.readLine();

                    System.out.print("Server : "+s+"\n");

                    if ( s.equalsIgnoreCase("BYE") )

                       break;

              }

               sk.close();

               sin.close();

               sout.close();

              stdin.close();

        }

}
```

 OUTPUT:

 Server:

 E:\nwlab>javac *.java

 E:\nwlab>java chatserver

 Client : hi

 Server : hi

Client:

E:\nwlab>java chatclient

Client : hi

Server : hi

Client :

Result:

        CHAT application using TCP Socket is implemented successfully.