**EXPERIMENT: 24**

**AIM:** To create Applications using TCP ECHO SERVER AND CLIENT.

**PROGRAM CODING**:

**EchoClient.java** import java.io.\*; import java.net.\*; public class echoc

{

public static void main(String[] args)

{

try

{

Socket s = new Socket("127.0.0.1",9999); BufferedReader r = new BufferedReader(new

InputStreamReader(s.getInputStream()));

PrintWriter w = new PrintWriter(s.getOutputStream(),true); BufferedReader con = new BufferedReader (new

InputStreamReader(System.in));

String line; do

{

line = r.readLine(); if(line != null)

System.out.println(line); line = con.readLine(); w.println(line);

}

while(!line.trim().equals("bye"));

}catch(Exception e)

{

System.err.println(e);

}

}

}

**Echoserver.java**

import java.io.\*; import java.net.\*; public class echos

{

public echos(int portNum)

{

try

{server = new ServerSocket(portNum);} catch(Exception e)

{System.out.println(e);}

}

public void serve()

{ try

{

while(true)

{

Socket client = server.accept();

BufferedReader r = new BufferedReader(new InputStreamReader(client.getInputStream()));

PrintWriter w = new PrintWriter(client.getOutputStream(),true);

w.println("Welcome jeva Server Echo"); String line;

do

{

line = r.readLine(); if(line!=null)

w.println("Got: "+line);

}

while(!line.trim().equals("bye")); client.close();

}

}catch(Exception e)

{

System.err.println(e);

}

}

public static void main(String[] args)

{

echos s = new echos(9999); s.serve();

}

private ServerSocket server;

}

**OUTPUT:**

Z:\CN>java echoc Welcome jeva Server Echo Hi!!

Got: Hi!!