CLIENT PROGRAM

import java.io.BufferedReader;

import java.io.DataInputStream;

import java.io.DataOutputStream;

import java.io.InputStreamReader;

import java.net.Socket;

import java.util.Scanner;

public class TCP\_Client{

    public static void main(String[] args) {

    Scanner sc=new Scanner(System.in);

     try{

          Socket s=new Socket("localhost",100);

          DataInputStream din=new DataInputStream(s.getInputStream());

          DataOutputStream dout=new DataOutputStream(s.getOutputStream());

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

         String packet1="",packet2="";

         long time1,time2,elapsedTime;

         System.out.print("Enter: ");

         packet1=sc.nextLine();

         dout.writeUTF(packet1);

         time1=java.time.LocalTime.now().getNano();

 while(!packet1.equals("stop"))

         {

          packet2=din.readUTF();

          time2=java.time.LocalTime.now().getNano();

          elapsedTime=(time2-time1);

             System.out.println("\nThe Time latency is : "+elapsedTime+" Nano Seconds\n");

             System.out.println("Server Replies: "+packet1);

             System.out.print("Enter: ");

             packet1=br.readLine();

          time1=java.time.LocalTime.now().getNano();

          dout.writeUTF(packet1);

          dout.flush();

        }

}

catch(Exception e){System.out.println(e.printStackTrace());}

    }

}

SERVER

import java.net.\*;

import java.io.\*;

public class TCP\_server {

public static void main(String args[])throws Exception{

    ServerSocket ss=new ServerSocket(100);

    Socket s=ss.accept();

    DataInputStream din=new DataInputStream(s.getInputStream());

    DataOutputStream dout=new DataOutputStream(s.getOutputStream());

    String str="";

    while(!str.equals("stop"))

    {

      str=din.readUTF();

      System.out.println("client says: "+str);

      dout.writeUTF(str);

      dout.flush();

    }

    din.close();

    s.close();

    ss.close();

}}

OUTPUT

Enter: hi

The Time latency is : 976200 Nano Seconds

Server Replies: hi

Enter: welcome

The Time latency is : 976900 Nano Seconds

Server Replies: welcome

Enter: