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Client.java
import java.io.*;
import java.net.*;
import java.util.Scanner;
public class Client
{
        public static void main(String[] args) throws IOException
        {
                try
                {
                        Scanner scn = new Scanner(System.in);
                        InetAddress ip = InetAddress.getByName("localhost");
                        Socket s = new Socket(ip, 5056);
                        DataInputStream dis = new DataInputStream(s.getInputStream());
                        DataOutputStream dos = new DataOutputStream(s.getOutputStream());
                        while (true)
                       {
                                System.out.println(dis.readUTF());
                                String tosend = scn.nextLine();
                                dos.writeUTF(tosend);
                                if(tosend.equals("Exit"))
                                {
                                        System.out.println("Closing this connection: " + s);
                                        s.close();
                                        System.out.println("Connection closed");
                                        break;
                                }
                                String received = dis.readUTF();
                                System.out.println(received);
                       }
                        scn.close();
```

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dis.close();
                        dos.close();
                }catch(Exception e){
                        e.printStackTrace();
                }
       }
}
Server.java
import java.io.*;
import java.text.*;
import java.util.*;
import java.net.*;
public class Server
{
        public static void main(String[] args) throws IOException
        {
                ServerSocket ss = new ServerSocket(5056);
                while (true)
                {
                        Socket s = null;
                        try
                       {
                                s = ss.accept();
                                System.out.println("A new client is connected: " + s);
                                DataInputStream dis = new DataInputStream(s.getInputStream());
                                DataOutputStream dos = new
DataOutputStream(s.getOutputStream());
```

System.out.println("Assigning new thread for this client");

```
Thread t = new ClientHandler(s, dis, dos);
                               t.start();
                       }
                       catch (Exception e){
                               s.close();
                                e.printStackTrace();
                       }
               }
       }
}
class ClientHandler extends Thread
{
        DateFormat fordate = new SimpleDateFormat("yyyy/MM/dd");
        DateFormat fortime = new SimpleDateFormat("hh:mm:ss");
       final DataInputStream dis;
       final DataOutputStream dos;
       final Socket s;
        public ClientHandler(Socket s, DataInputStream dis, DataOutputStream dos)
       {
               this.s = s;
               this.dis = dis;
               this.dos = dos;
       }
        @Override
        public void run()
       {
               String received;
               String toreturn;
               while (true)
               {
                       try {
```

```
"Type Exit to terminate connection.");
                received = dis.readUTF();
                if(received.equals("Exit"))
                {
                        System.out.println("Client " + this.s + " sends exit...");
                        System.out.println("Closing this connection.");
                        this.s.close();
                        System.out.println("Connection closed");
                        break;
                }
                Date date = new Date();
                switch (received) {
                        case "Date":
                                toreturn = fordate.format(date);
                                dos.writeUTF(toreturn);
                                break;
                        case "Time":
                                toreturn = fortime.format(date);
                                dos.writeUTF(toreturn);
                                break;
                        default:
                                dos.writeUTF("Invalid input");
                                break;
                }
        } catch (IOException e) {
                e.printStackTrace();
       }
}
try
{
```

dos.writeUTF("What do you want?[Date | Time]..\n"+