PRACTICAL 1

**AIM :** Create Chat application using either TCP or UDP protocol

❖ TCP

- **Server Side:**

```
import java.net.*;
import java.io.*;
public class P1MySerever {
  public static void main(String[] args){
   try{
      ServerSocket ss = new ServerSocket(8070);
      Socket s = ss.accept();
      OutputStream obj = s.getOutputStream();
      PrintStream ps = new PrintStream(obj);
      ps.println("Hello clients");
      ps.println("How are you?");
      ps.println("This is from serever side");
      ss.close();
      s.close();
      ps.close();
   }
   catch(IOException ex){
     ex.printStackTrace();
   }
   }
}
```
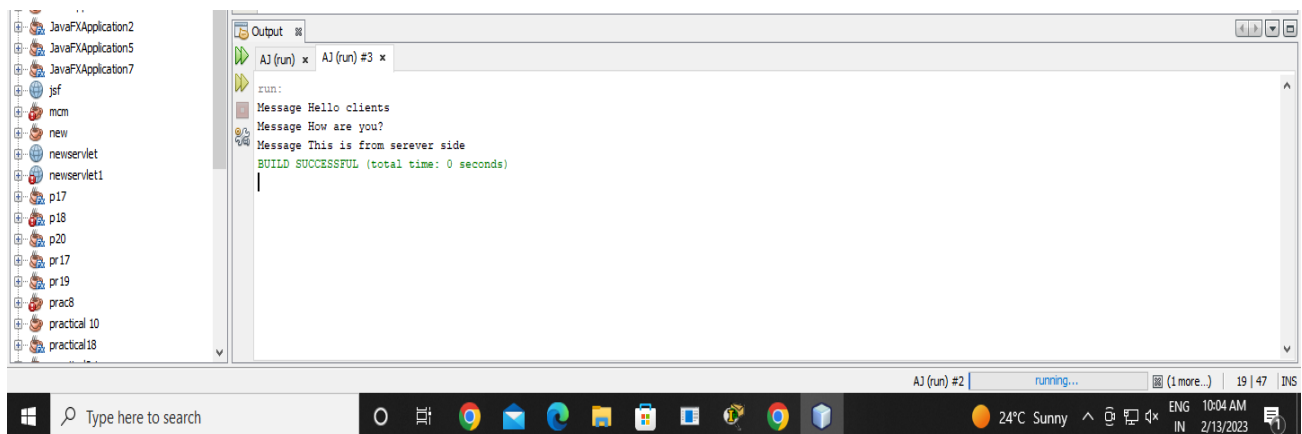
O/P:
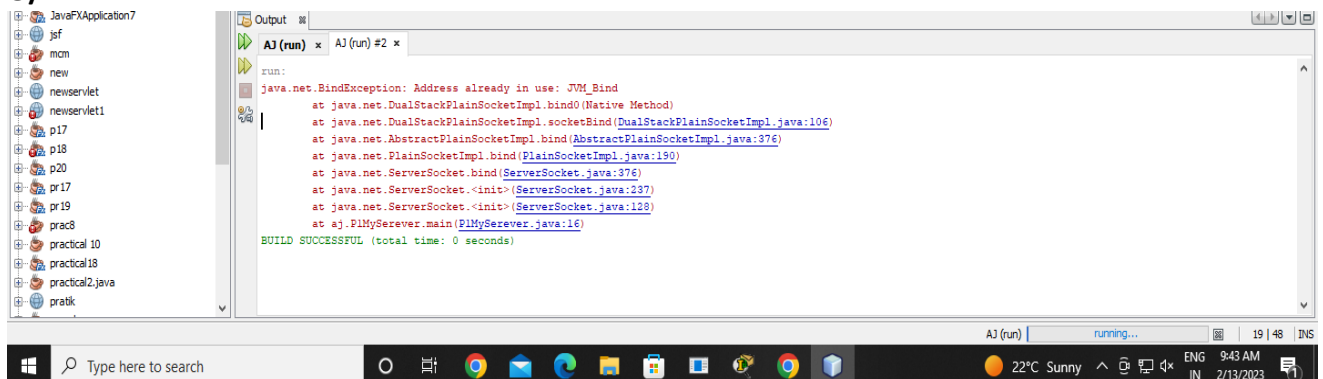
- **Client Side:**

```java
import java.net.*;
import java.io.*;
public class P1MyClients {
   public static void main(String[] args){
   try{
     Socket s = new Socket("localhost",8070);
     InputStream is = s.getInputStream();
     BufferedReader br = new BufferedReader(new InputStreamReader(is));
     String receivedMessage = br.readLine();
      System.out.println("Message "+receivedMessage);
      String receivedMessage1 = br.readLine();
      System.out.println("Message "+receivedMessage1);
      String receivedMessage2 = br.readLine();
      System.out.println("Message "+receivedMessage2);
      br.close();
      s.close();
   }
   catch(IOException ex){
     ex.printStackTrace();
   }
}
}
```
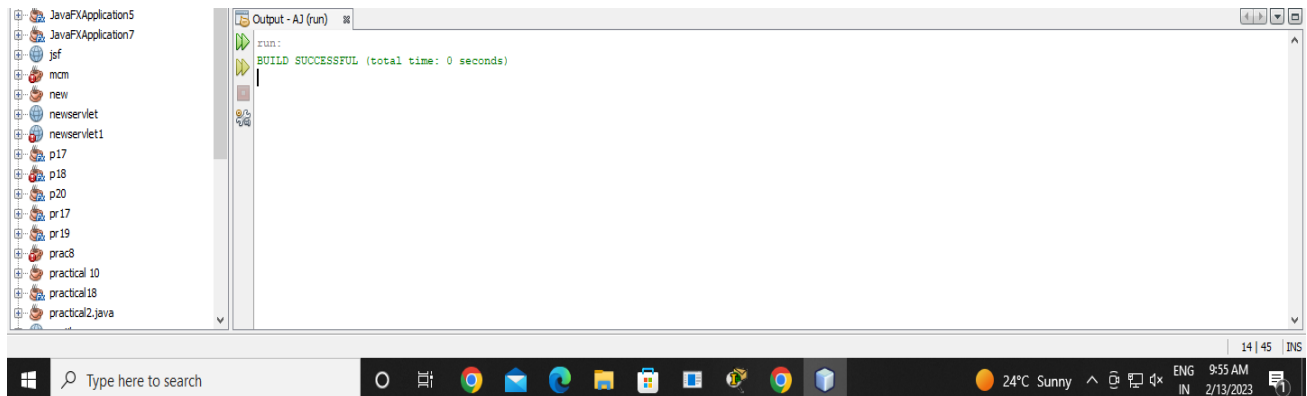
O/P;

❖ UDP

- **Server:**

```java
import java.net.*;
import java.io.*;
public class P1UDPsender {
    public static void main(String[] args) {
try {
DatagramSocket ds=new DatagramSocket();
String str="Message from Sender";
InetAddress ip=InetAddress.getByName("localhost");
DatagramPacket dp=new DatagramPacket(str.getBytes(),
str.length(), ip, 6666);
ds.send(dp);
ds.close();
} catch (Exception ex) {
ex.printStackTrace();
}
}
}
```

O/P:

- **Client:**

```java
import java.net.*;
import java.io.*;
public class P1UDPreceiver {
    public static void main(String[] args) {
try {
```

```
DatagramSocket ds = new DatagramSocket(6666);
byte buffer[] = new byte[1024];
DatagramPacket dp = new DatagramPacket(buffer, 1024);
ds.receive(dp);
String str =new String(dp.getData(),0,dp.getLength());
System.out.println("Receive: "+str);
ds.close();
} catch (Exception ex) {
ex.printStackTrace();
}
}
}
```

O/P: