SHREE SWAMI ATMANAND SARASWATI
INSTITUTE OF TECHNOLOGY
COMPUTER ENGINEERING DEPARTMENT

Lab Plan

Faculty Name: Mrs Anali A Shah, Mrs Dipali S Masalia
Subject name & code: ADVANCED JAVA PROGRAMMING (3160707)
Class: 3rd Year (6th Semester)
Academic Year: 2022-2023

Sr. No.	Practical Name
1.	Create Chat application using either TCP or UDP protocol.
2.	Write a program to Create Simple JDBC Application to insert and retrieve records from Access Database(statement).
3.	Write an HTML page which takes inputs for below mentioned fields and invokes a java servlet program which enters the fields in the database table. 1. EMP_ID, 2. EMP_NAME, 3. DEPT, 4. CITY.
4.	Write a HTML page which inputs the below mentioned fields and invoke the java Servlet program which enters the fields in Access Database using Prepared Statement. 1. ENROLMENT, 2. STUDENT_NAME, 3. BRANCH, 4. YEAR
5.	Implement a Servlet which counts the number of Hits. (I.e. Website Hit-counter)
6.	Write a JSP page that displays the user from containing the two fields-user name and city.
7.	Write a JSP page to implement Cookie. Create an html file to read the values from the user. Create the cookie, Read the created cookie and delete the cookie using JSP.
8.	Implement the shopping cart for users for the online shopping. Apply the concept of session.
9.	Design a web page that takes the Username from user and if it is a valid username prints "Welcome Username". Use JSF to implement.
10.	To Study about Hibernate Architecture.
11.	Write an application to keep record and retrieve record of student. The record includes student id, enrollment number, semester, SPI. Use MVC arechitecture.
Total number of labs	

Mrs. Anali A Shah, Mrs. Dipali Masalia
   Subject Faculty

Mrs. Dipali S Masalia

   Subject Co-ordinator

Prof. Chirag Patel

   Head of Department

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();
    }
    }
}
```
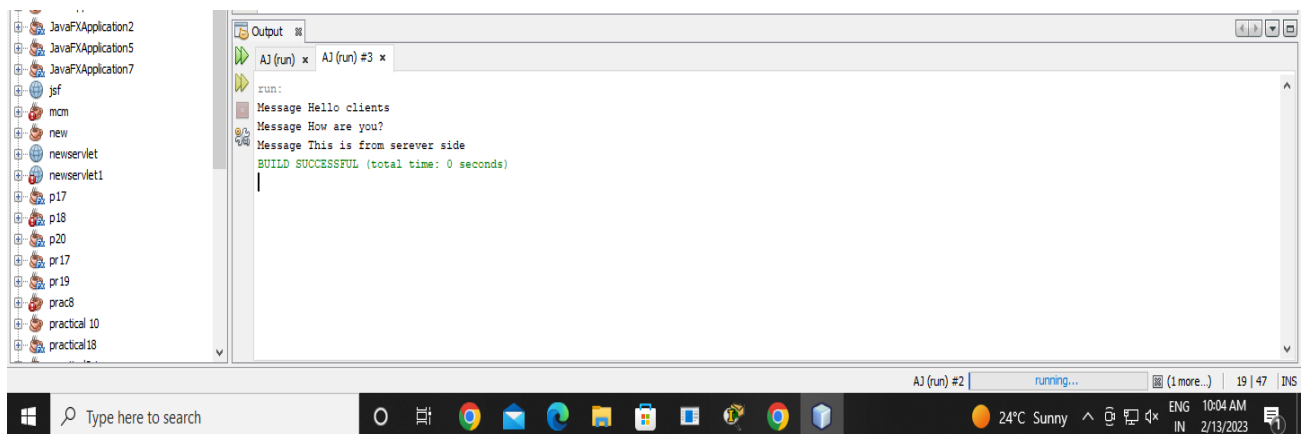
O/P:
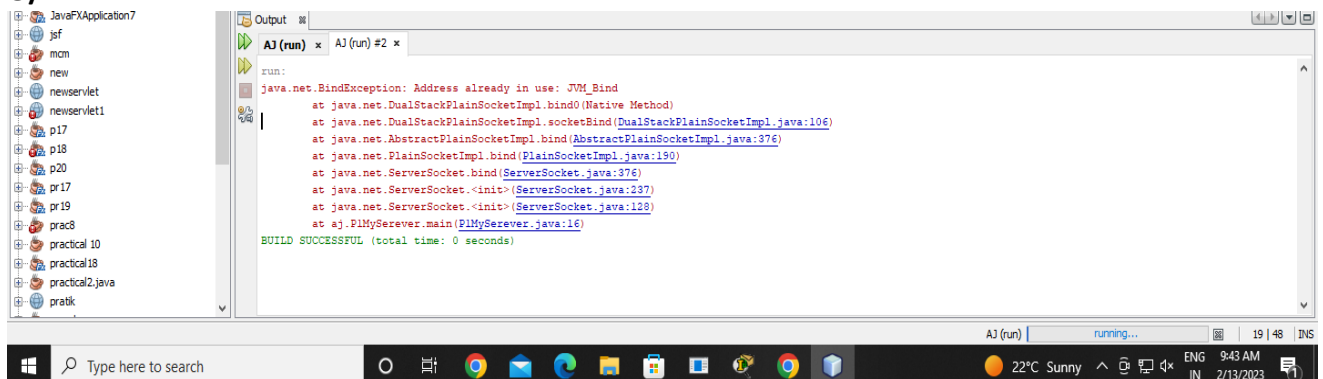
- **Client Side:**

```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();
    }
}
}
```
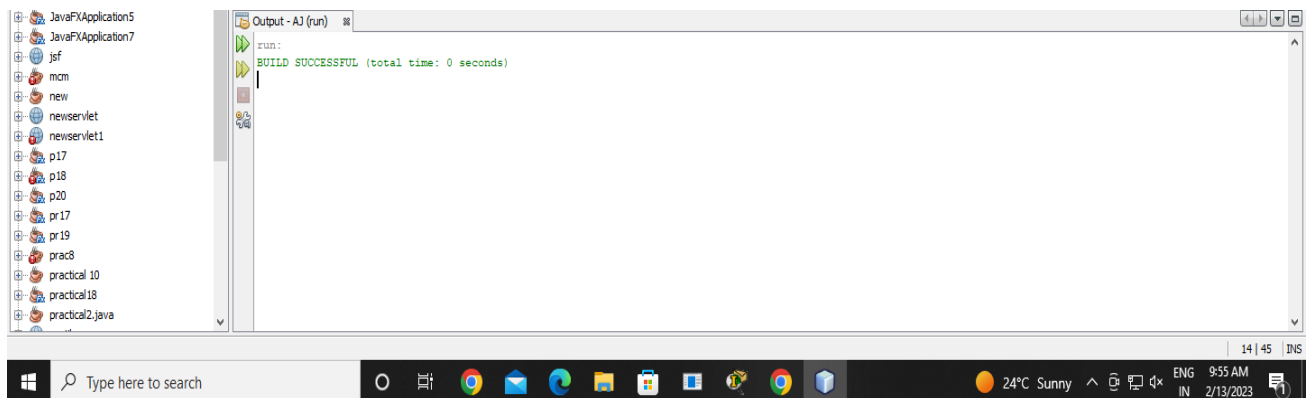
O/P;

❖ UDP

- **Server:**
```
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:**
```
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: