Experiment no.7

Aim:- implementation of client-server Architecture using TCP/IP.

A)Client-program:-

Input:-

```
Package manishjadhav;

import java.io.IOException;
import java.io.ObjectInputStream;
import java.io.ObjectOutputStream;
import java.net.InetAddress;
import java.net.Socket;
import java.net.UnknownHostException;

public class socketclient4 {
    private static Socket Socket;
    private static int i;
    public static void main(String[] args)throws
        UnknownHostException,IOException,ClassNotFoundException,InterruptedException{
      InetAddress host=InetAddress.getLocalHost();
      Socket socket=null;
      ObjectOutputStream oos=null;
      ObjectInputStream ois=null;
      for(int i=0;i<5;i++);
      {
        Socket=new Socket(host.getHostName(),14);
        oos=new ObjectOutputStream(Socket.getOutputStream());
        System.out.println("SENDING REQUEST SOCKET SERVER");
        oos.writeObject("Name: Manish Jadhav\n"+"PRN:2030408246006\n"+"Roll no: 2201933");
        ois=new ObjectInputStream(Socket.getInputStream());
        String message=(String)
            ois.readObject();
        System.out.println("Message:"+message);
        ois.close();
        oos.close();
        Thread.sleep(100);

      }
    }

}
```
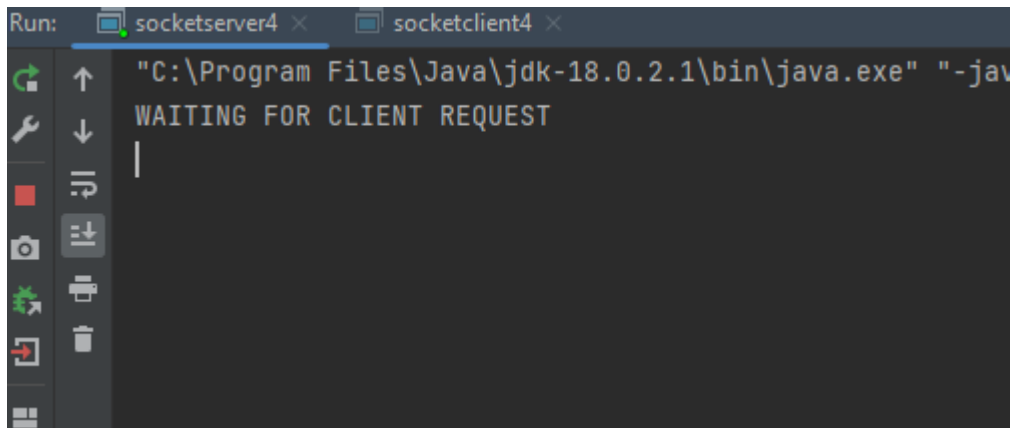
b)server-program:-
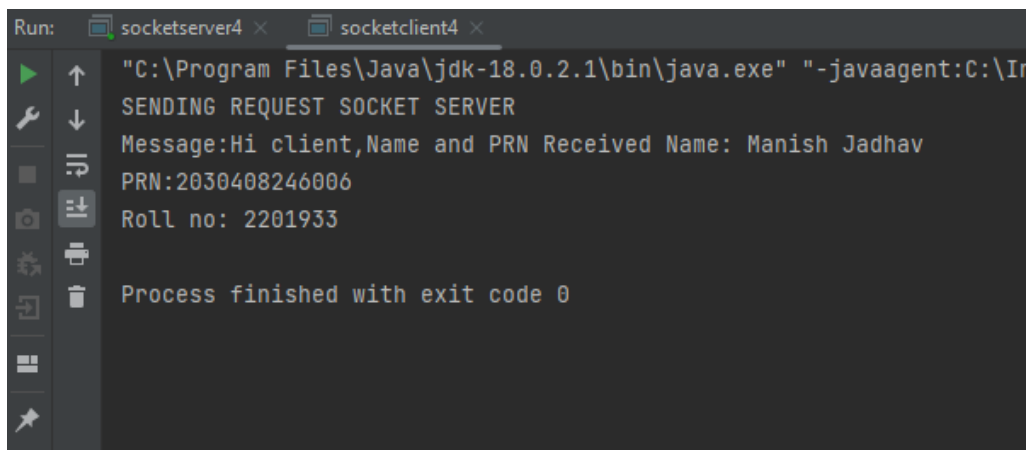
input:-

```java
package manishjadhav;

import java.io.IOException;
import java.io.ObjectInputStream;
import java.io.ObjectOutputStream;
import java.net.ServerSocket;
import java.net.Socket;

public class socketserver4 {
    static ServerSocket server;
    static final int port=14;
    public static void main(String[]args)throws IOException,ClassNotFoundException{
        socketserver4 f=new socketserver4();
        server=new ServerSocket(port);
        while(true){
            System.out.println("WAITING FOR CLIENT REQUEST");
            Socket socket=server.accept();
            ObjectInputStream ois=new ObjectInputStream(socket.getInputStream());
            String message=(String)
                ois.readObject();
            System.out.println("Message received "+message);
            ObjectOutputStream oos= new ObjectOutputStream(socket.getOutputStream());
            oos.writeObject("Hi client,Name and PRN Received "+message);
            oos.close();
            socket.close();
            if(message.equalsIgnoreCase("exit"))
                break;
        }
        System.out.println("Shut down socket server!!!.....");

    }

}
```

Output:-

Practical Performance (4)	Writeup & Oral (4)	Attendance (2)	Total (10)