Progressive Education Society’s

**MODERN COLLEGE OF ENGINEERING, Pune -05.**

(An Autonomous Institute Affiliated to Savitribai Phule Pune University)

MCA Department

**PRACTICAL SUBMISSION RECORD- A.Y. 2024-25**

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| **Class: FYMCA Div: A**  **Semester: II** | **Course Code: MCA01554**  **Course Name: Java Programming Laboratory** | | **Batch: F2** |
| **Name: Pranav Raju Malwatkar** | | **Roll No: 51037** | |
| **CO No: CO515.3** | | **Assignment No: 8** | |

**Program Title: 8) Write a program to establish connection between client and server use datagram packet &**

**socket.**

**Program Code:**

// UDP Client

import java.net.\*;

import java.util.Scanner;

public class UDP\_Client {

public static void main(String[] args) {

try {

DatagramSocket clientSocket = new DatagramSocket();

InetAddress serverAddress = InetAddress.getByName("localhost");

byte[] sendData;

byte[] receiveData = new byte[1024];

Scanner scanner = new Scanner(System.in);

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

String message = scanner.nextLine();

sendData = message.getBytes();

DatagramPacket sendPacket = new DatagramPacket(sendData, sendData.length, serverAddress, 9876);

clientSocket.send(sendPacket);

DatagramPacket receivePacket = new DatagramPacket(receiveData, receiveData.length);

clientSocket.receive(receivePacket);

String serverResponse = new String(receivePacket.getData(), 0, receivePacket.getLength());

System.out.println("Server response: " + serverResponse);

clientSocket.close();

scanner.close();

} catch (Exception e) {

e.printStackTrace();

}

}

}

// UDP Server

import java.net.\*;

public class UDP\_Server {

public static void main(String[] args) {

try {

DatagramSocket serverSocket = new DatagramSocket(9876);

byte[] receiveData = new byte[1024];

byte[] sendData;

System.out.println("Server is running...");

while (true) {

DatagramPacket receivePacket = new DatagramPacket(receiveData, receiveData.length);

serverSocket.receive(receivePacket);

String clientMessage = new String(receivePacket.getData(), 0, receivePacket.getLength());

System.out.println("Received: " + clientMessage);

InetAddress clientAddress = receivePacket.getAddress();

int clientPort = receivePacket.getPort();

String response = "Hello from server";

sendData = response.getBytes();

DatagramPacket sendPacket = new DatagramPacket(sendData, sendData.length, clientAddress, clientPort);

serverSocket.send(sendPacket);

serverSocket.close();

}

} catch (Exception e) {

e.printStackTrace();

}

}

}

**Output:**

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