**ARPServer.java:**

import java.io.\*;

import java.net.\*;

import java.util.\*;

public class ARPServer {

public static void main(String[] args) {

try {

Map<String, String> arpTable = new HashMap<>();

arpTable.put("192.168.1.2", "AA:BB:CC:DD:EE:01");

arpTable.put("192.168.1.3", "AA:BB:CC:DD:EE:02");

arpTable.put("192.168.1.4", "AA:BB:CC:DD:EE:03");

ServerSocket serverSocket = new ServerSocket(6789);

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

while (true) {

Socket clientSocket = serverSocket.accept();

System.out.println("Client connected: " + clientSocket);

BufferedReader in = new BufferedReader(new InputStreamReader(clientSocket.getInputStream()));

PrintWriter out = new PrintWriter(clientSocket.getOutputStream(), true);

String ipRequest = in.readLine();

System.out.println("Request for IP: " + ipRequest);

String mac = arpTable.getOrDefault(ipRequest, "MAC Address Not Found");

out.println(mac);

clientSocket.close();

}

} catch (IOException e) {

e.printStackTrace();

}

}

}

**ARPClient.java:**

import java.io.\*;

import java.net.\*;

public class ARPClient {

public static void main(String[] args) {

try {

Socket socket = new Socket("localhost", 6789);

BufferedReader userIn = new BufferedReader(new InputStreamReader(System.in));

BufferedReader in = new BufferedReader(new InputStreamReader(socket.getInputStream()));

PrintWriter out = new PrintWriter(socket.getOutputStream(), true);

System.out.print("Enter IP Address to resolve: ");

String ip = userIn.readLine();

out.println(ip);

String response = in.readLine();

System.out.println("MAC Address: " + response);

socket.close();

} catch (IOException e) {

e.printStackTrace();

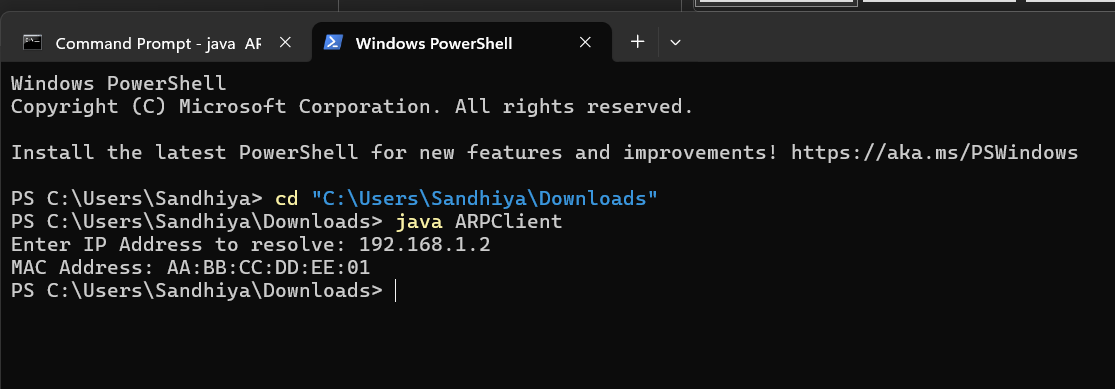
}

}

}

**A computer screen shot of a program

AI-generated content may be incorrect.OUTPUT:**

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