EX.NO:6(a) SIMULATING ARP PROTOCOL

PROGRAM:

Server.java:

import java.io.\*;

import java.net.\*;

import java.util.\*;

class Server {

public static void main(String args[]) {

try {

ServerSocket obj = new ServerSocket(3636);

Socket obj1 = obj.accept();

BufferedReader din = new BufferedReader(new InputStreamReader(obj1.getInputStream()));

DataOutputStream dout = new DataOutputStream(obj1.getOutputStream());

String[] ip = {"165.165.80.80", "165.165.79.1"};

String[] mac = {"6A:08:AA:C2", "8A:BC:E3:FA"};

while (true) {

String str = din.readLine();

if (str == null) {

break;

 }

  boolean found = false;

  for (int i = 0; i < ip.length; i++) {

              if (str.equals(ip[i])) {

                        dout.writeBytes(mac[i] + '\n');

                        found = true;

                        break;

                    }

                }

    if (!found) {

                    dout.writeBytes("MAC not found\n");

                }

            }

  obj.close();

        } catch (Exception e) {

            System.out.println(e);

        }

    }

}

Client.java:

import java.io.\*;

import java.net.\*;

class Client {

    public static void main(String args[]) {

        try {

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

            Socket clsct = new Socket("127.0.0.1", 3636);

            BufferedReader din = new BufferedReader(new InputStreamReader(clsct.getInputStream()));

            DataOutputStream dout = new DataOutputStream(clsct.getOutputStream());

            System.out.println("Enter the Logical address (IP):");

            String str1 = in.readLine();

            dout.writeBytes(str1 + '\n');

            String str = din.readLine();

            System.out.println("The Physical Address is: " + str);

             clsct.close();

} catch (Exception e) {

System.out.println(e);

}

}

}

OUTPUT:



