//DNS server

import java.io.\*;

import java.net.\*;

public class dnsserver

{

private static int indexOf(String[] array, String str)

{

str = str.trim();

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

{

if (array[i].equals(str)) return i;

}

return -1;

}

public static void main(String arg[])throws IOException

{

String[] hosts = {"zoho.com", "gmail.com","google.com", "facebook.com"};

String[] ip = {"172.28.251.59", "172.217.11.5","172.217.11.14",

"31.13.71.36"}; System.out.println("Press Ctrl + C to Quit");

while (true)

{

DatagramSocket serversocket=new DatagramSocket(1362);

byte[] senddata = new byte[1021];

byte[] receivedata = new byte[1021];

DatagramPacket recvpack = new DatagramPacket(receivedata,

receivedata.length);

serversocket.receive(recvpack);

String sen = new String(recvpack.getData());

InetAddress ipaddress = recvpack.getAddress();

int port = recvpack.getPort();

String capsent;

System.out.println("Request for host " + sen);

if(indexOf (hosts, sen) != -1)

capsent = ip[indexOf (hosts, sen)];

else

capsent = "Host Not Found"; senddata = capsent.getBytes();

DatagramPacket pack = new DatagramPacket (senddata,

senddata.length,ipaddress,port);

serversocket.send(pack);

serversocket.close();

}

}

}

//DNS client

import java.io.\*;

import java.net.\*;

public class dnsclient

{

public static void main(String args[])throws IOException

{

BufferedReader br = new BufferedReader(new

InputStreamReader(System.in));

DatagramSocket clientsocket = new DatagramSocket();

InetAddress ipaddress;

if (args.length == 0)

ipaddress = InetAddress.getLocalHost();

else

ipaddress = InetAddress.getByName(args[0]);

byte[] senddata = new byte[1024];

byte[] receivedata = new byte[1024];

int portaddr = 1362;

System.out.print("Enter the hostname : ");

String sentence = br.readLine();

senddata = sentence.getBytes();

DatagramPacket pack = new DatagramPacket(senddata,senddata.length,

ipaddress,portaddr);

clientsocket.send(pack);

DatagramPacket recvpack =new

DatagramPacket(receivedata,receivedata.length);

clientsocket.receive(recvpack);

String modified = new String(recvpack.getData());

System.out.println("IP Address: " + modified);

clientsocket.close();

}

}