DNSServer Implementation:

import java.util.Scanner;

import java.net.\*;

import java.io.\*;

class DNSServer{

static String[][] record=new String[10][10];

static int pointer=0;

static Scanner sc=new Scanner(System.in);

DNSServer()

{

record[0][0]="www.google.com";

record[0][1]="172.164.135.35";

record[1][0]="www.yahoo.com";

record[1][1]="123.24.56.78";

record[2][0]="www.msec.edu.in";

record[2][1]="222.34.56.77";

pointer=3;

}

void connectToClient() throws IOException

{

DatagramSocket das = new DatagramSocket(1234);

byte[] receive = new byte[65535];

DatagramPacket DpReceive = null;

while (true)

{

DpReceive = new DatagramPacket(receive, receive.length);

das.receive(DpReceive);

if (receive.toString().equals("connect"))

{

//connect to a client and get requests

break;

}

receive = new byte[65535];

}

}

Boolean isActive()

{

//System.out.println(this.getClass());

if(this.getClass().toString().equals("class DNSServer"))

{

System.out.print("This Server is active");

//System.out.println(this.getClass());

return true;

}

return false;

}

void showtable()

{

System.out.println("Name\t\tIP4");

for (int i=0;i<pointer;i++)

{

System.out.println(record[i][0]+"\t"+record[i][1]);

}

}

void addRecord()

{

if(pointer>=10)

{

System.out.println("Sorry server table is full!\n Cannot add record\n");

}

else{

System.out.println("enter name");

String name=sc.next();

System.out.println("enter Address");

String add=sc.next();

record[pointer][0]=name;

record[pointer][1]=add;

pointer+=1;

}

}

void getName()

{

System.out.println("enter ip of site");

String ip=sc.next();

for (int i=0;i<pointer;i++)

{

if(record[i][1].equals(ip))

{

System.out.println("the name is "+record[i][0]);

return ;

}

}

System.out.println("Record not found");

}

void getIp()

{

System.out.println("enter name of site");

String name=sc.next();

for (int i=0;i<pointer;i++)

{

if(record[i][0].equals(name))

{

System.out.println("the Ip is "+record[i][1]);

return ;

}

}

System.out.println("Record not found");

}

public static void main(String[] args)

{

DNSServer ds=new DNSServer();

while (true){

System.out.println("\nEnter your choice\n1.Check If Active\n2.Check DNS Table\n3.Add a Record\n4.getName\n5.getIp\n6.exit\n");

int op=sc.nextInt();

switch (op){

case 1:

Boolean x=ds.isActive();

break;

case 2:

ds.showtable();

break;

case 3:

ds.addRecord();

break;

case 4:

ds.getName();

break;

case 5:

ds.getIp();

break;

case 6:

System.exit(0);

break;

}

}

}

}OUTPUT



