



The image displays two Windows command prompt windows. The top window, titled 'C:\Windows\System32\cmd.exe - java Server', shows the compilation of 'Server.java' and the execution of the 'Server' class. It displays a request for the host 'gokulsreejith.com'. The bottom window, titled 'C:\Windows\System32\cmd.exe', shows the compilation of 'Client.java' and the execution of the 'Client' class. It prompts for a hostname, which is entered as 'gokulsreejith.com', and displays the resulting IP address '168.135.???.9'.

```
C:\Windows\System32\cmd.exe - java Server
D:\Smartans\UDPDNS>javac Server.java
D:\Smartans\UDPDNS>java Server
Press Ctrl + C to Quit
Request for host gokulsreejith.com

C:\Windows\System32\cmd.exe
D:\Smartans\UDPDNS>javac Client.java
D:\Smartans\UDPDNS>java Client
Enter the hostname: gokulsreejith.com
IP Address: 168.135.???.9

D:\Smartans\UDPDNS>
```

Server :

```
import java.io.*;
```

```
import java.net.*;
```

```
public class Server{
```

```
    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 = { "yahoo.com", "gmail.com", "cricinfo.com",  
        facebook.com", "gokulsreejith.com"};
```

```
        String[] ip = {"68.180.206.184", "209.85.148.19", "80.168.92.140",  
        "69.63.189.16", "168.135.77.9"};
```

```
        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.print("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();

    }

}

}
```

Client :

```
import java.io.*;

import java.net.*;

public class Client{

    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();

    }

}
```