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EXPERIMENT: 32

AIM: To implement a DNS server and client in java using UDP sockets.

PROGRAM:

```
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();

```

OUTPUT:

T Server

E:\nwlab>java dnsserver

Press Ctrl + C to Quit

Request for host google.com

Request for host flipkart.com

RESULT: Therefore, implementation of a DNS server and client in java using UDP sockets.