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EXPERIMENT: 26

AIM: TO STUDY THE ARP PROTOCOLS.

PROGRAM:

```
arpclient.java import java.io.*; import java.net.*; import java.util.*;
public class arpc
{
    public static void main(String args[])
    {
        try
        {
            BufferedReader in=new BufferedReader(new
            InputStreamReader(System.in)); Socket clsct=new
            Socket("127.0.0.1",200);

            DataInputStream din=new DataInputStream(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);
}
}
}

arpServer.java import java.io.*; import java.net.*; import java.util.*;

public class arpServer {

public static void main(String args[])

{

try

{

ServerSocket obj=new ServerSocket(2005); Socket obj1=obj.accept();

while(true)

{

DataInputStream din=new DataInputStream(obj1.getInputStream());
DataOutputStream dout=new
DataOutputStream(obj1.getOutputStream()); String
str=din.readLine();

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

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

```

```
for(int i=0;i<ip.length;i++)
{
    if(str.equals(ip[i]))
    {
        dout.writeBytes(mac[i]+'\\n'); break;
    }
}obj.close();
}
}
catch(Exception e)
{
    System.out.println(e);
}
}
```

OUTPUT:

arpClient D:\>javac arpc.java D:\>java arpc

Enter the Logical address(IP): 165.165.80.80

The Physical Address is:6A:08:AA:C2

RESULT: Therefore study of ARP protocols has been successfully executed using JAVA programming