**NAME: S.AJAY KUMAR REDDY**

**REG.NO.: 192211480**

**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 excecuted using JAVA programming