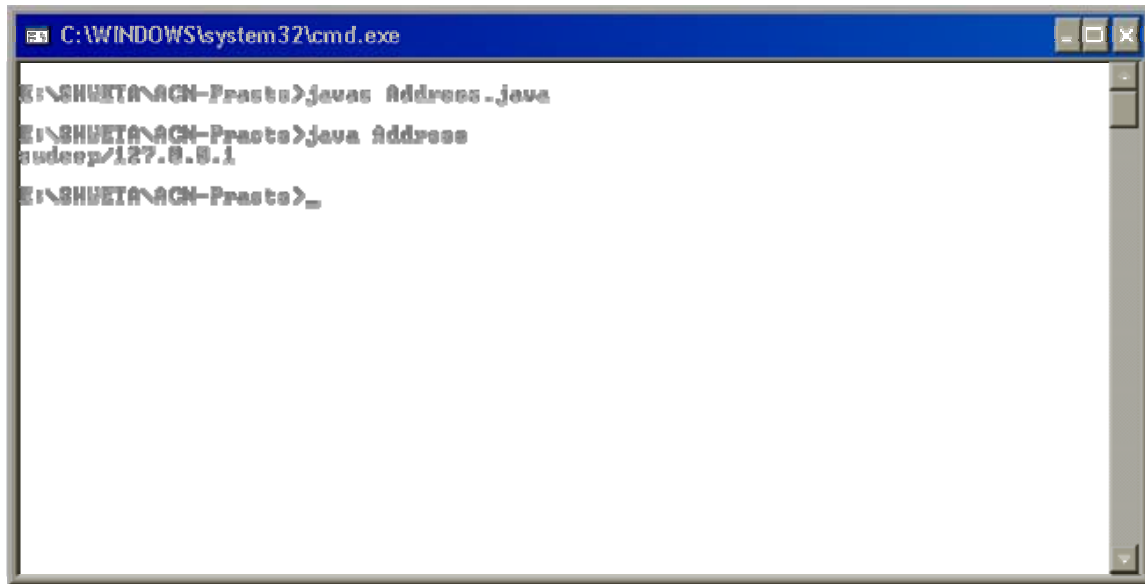


Pract 1

/* Client Server Program that will display the IP address and the local host address*/

```
import java.net.*;
public class Address
{
    public static void main(String args[]) //throws Exception
    {
        try
        {
            InetAddress addr = InetAddress.getLocalHost();
            System.out.println(addr.toString());
        }
        catch(Exception e)
        {
            e.printStackTrace();
        }
    }
}
```

OUTPUT :



```
C:\WINDOWS\system32\cmd.exe
E:\SHWETA\AGN-Practs>javac Address.java
E:\SHWETA\AGN-Practs>java Address
sudeep/127.0.0.1
E:\SHWETA\AGN-Practs>
```

Pact 2 - A

/*Create server that will calculate the factorial for client*/

```
import java.net.*;
import java.io.*;
import java.lang.*;

class tcpClientFact
{
    public static void main(String args[])
    {
        try
        {
            String str,str1;
            BufferedReader infu = new BufferedReader(new
            InputStreamReader(System.in));
            Socket cs = new Socket("LocalHost",8001);
            DataOutputStream out = new
            DataOutputStream(cs.getOutputStream());
            BufferedReader infs = new BufferedReader(new
            InputStreamReader(cs.getInputStream()));
            System.out.println("Enter a number : ");
            str = infu.readLine();
            out.writeBytes(str + "\n");
            str1 = infs.readLine();
            System.out.println("The factorial of " + str + "is : " + str1);
            cs.close();
        }
        catch(Exception e)
        {
            System.out.println(e.toString());
        }
    }
}
```

/*Create server that will calculate the factorial for client*/

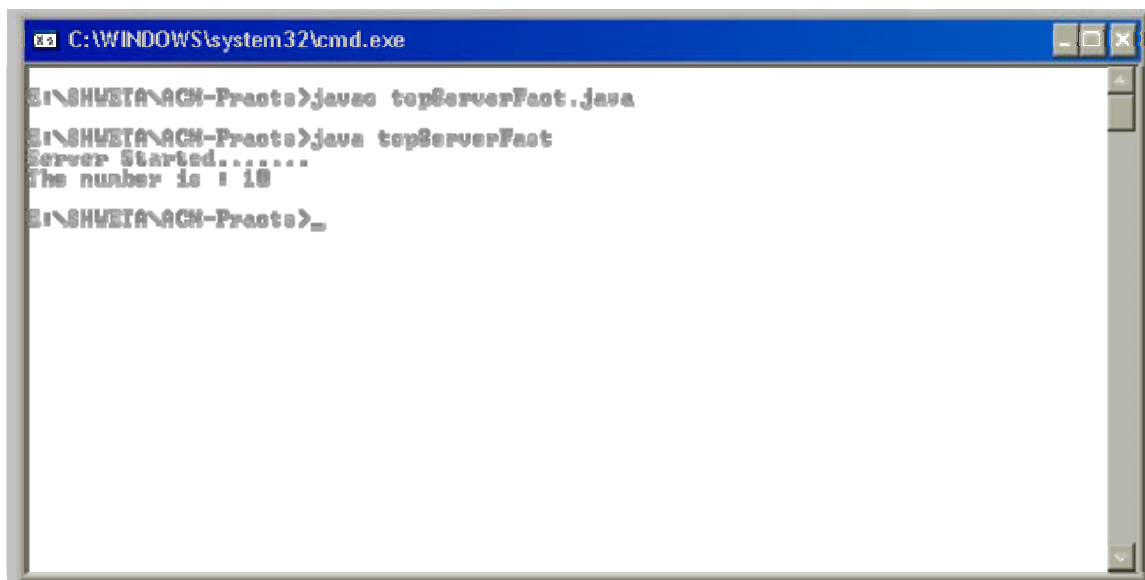
```
import java.net.*;
import java.io.*;
import java.lang.*;
class tcpServerFact
{
    public static void main(String args[])
    {
        try
        {
            String str,str1;
            int fact =1;
            ServerSocket ws = new ServerSocket(8001);
            System.out.println("Server Started.....");
            Socket cons = ws.accept();
            BufferedReader ifc = new BufferedReader(new
            InputStreamReader(cons.getInputStream()));
            DataOutputStream otc = new
            DataOutputStream(cons.getOutputStream());
            str = ifc.readLine();
            System.out.println("The number is : " + str);
            int a = Integer.parseInt(str);
            for(int i=1; i<=a; i++)
            {
                fact = fact * i;
            }
            str1 = fact + "\n";
            otc.writeBytes(str1);
        }
        catch(Exception e)
        {
            System.out.println(e.toString());
        }
    }
}
```

OUTPUT :



```
C:\WINDOWS\system32\cmd.exe

E:\SHWETA\ACM-Pracs>javac topClientFact.java
E:\SHWETA\ACM-Pracs>java topClientFact
Enter a number :
10
The factorial of 10 is :3628800
E:\SHWETA\ACM-Pracs>_
```



```
C:\WINDOWS\system32\cmd.exe

E:\SHWETA\ACM-Pracs>javac topServerFact.java
E:\SHWETA\ACM-Pracs>java topServerFact
Server Started.....
The number is : 10
E:\SHWETA\ACM-Pracs>_
```

Pact 2 – B

/*Create server that will calculate greatest of two numbers*/

```
import java.net.*;
import java.io.*;
import java.lang.*;

class tcpClientGreater
{
    public static void main(String args[])
    {
        try
        {
            int a,b;
            Socket cs = new Socket("LocalHost",5000);

            BufferedReader infu = new BufferedReader(new
            InputStreamReader(System.in));
            DataInputStream in = new DataInputStream(cs.getInputStream());
            DataOutputStream out = new
            DataOutputStream(cs.getOutputStream());

            System.out.println("Enter a number : ");
            a = Integer.parseInt(infu.readLine());
            System.out.println("Enter a number : ");
            b = Integer.parseInt(infu.readLine());

            out.writeInt(a);
            out.writeInt(b);
            System.out.println(in.readUTF());
            cs.close();
        }
        catch(Exception e)
        {
            System.out.println(e.toString());
        }
    }
}
```

```

/*Create server that will calculate greatest of two numbers */

import java.net.*;
import java.io.*;
import java.lang.*;
class tcpServerGreater
{
    public static void main(String args[])
    {
        try
        {
            ServerSocket ws = new ServerSocket(5000);
            System.out.println("Server Started.....");
            Socket cons = ws.accept();

            DataOutputStream otc = new
            DataOutputStream(cons.getOutputStream());
            DataInputStream in = new
            DataInputStream(cons.getInputStream());

            int x= in.readInt();
            int y= in.readInt();

            if(x>y)
            {
                otc.writeUTF(x + "is greater \n");
            }
            else if(y>x)
            {
                otc.writeUTF(y + "is greater \n");
            }
            else
            {
                otc.writeUTF(x + "and" + y + "both are equal \n");
            }
        }
        catch(Exception e)
        {
            System.out.println(e.toString());
        }
    }
}

```


OUTPUT :



```
C:\WINDOWS\system32\cmd.exe

E:\SHWETA\ACN-Practs>javas topClientGreater.java
E:\SHWETA\ACN-Practs>java topClientGreater
Enter a number :
20
Enter a number :
14
20 is greater

E:\SHWETA\ACN-Practs>_
```



```
C:\WINDOWS\system32\cmd.exe

E:\SHWETA\ACN-Practs>javac topServerGreater.java
E:\SHWETA\ACN-Practs>java topServerGreater
Server Started.....
E:\SHWETA\ACN-Practs>
```

Pract 2 – C

```
/*Create server that will identify the prime number*/
```

```
import java.net.*;  
import java.io.*;  
import java.lang.*;
```

```
class tcpClientPrime
```

```
{  
    public static void main(String args[])  
    {  
        try  
        {  
            int a;  
            Socket cs = new Socket("LocalHost",8001);  
  
            BufferedReader infu = new BufferedReader(new  
            InputStreamReader(System.in));  
  
            DataInputStream in = new DataInputStream(cs.getInputStream());  
            DataOutputStream out = new  
            DataOutputStream(cs.getOutputStream());  
  
            System.out.println("Enter a number : ");  
            a = Integer.parseInt(infu.readLine());  
  
            out.writeInt(a);  
  
            System.out.println(in.readUTF());  
            cs.close();  
        }  
        catch(Exception e)  
        {  
            System.out.println(e.toString());  
        }  
    }  
}
```

```

/*Create server that will calculate the factorial for client*/

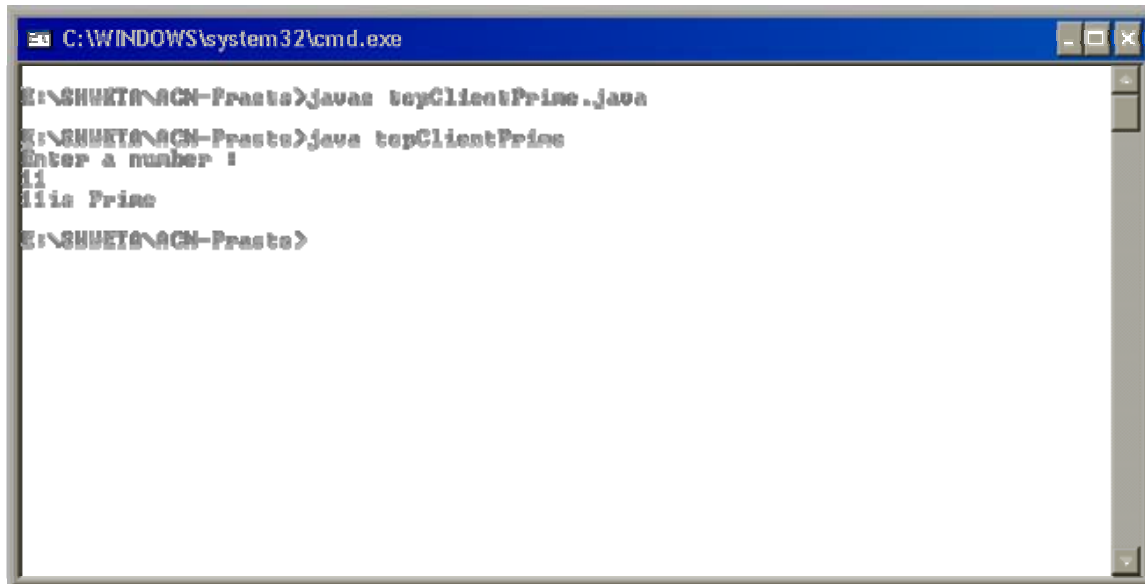
import java.net.*;
import java.io.*;
import java.lang.*;
class tcpServerPrime
{
    public static void main(String args[])
    {
        try
        {
            ServerSocket ws = new ServerSocket(8001);
            System.out.println("Server Started.....");
            Socket cons = ws.accept();

            DataOutputStream otc = new
            DataOutputStream(cons.getOutputStream());
            DataInputStream in = new
            DataInputStream(cons.getInputStream());

            int x= in.readInt();
            int y = x/2;
            if(x ==1 || x ==2 || x ==3)
            {
                otc.writeUTF(x + "is Prime");
                System.exit(0);
            }
            for(int i=2; i<=y; i++)
            {
                if(x%i!=0)
                {
                    otc.writeUTF(x + "is Prime");
                }
                else
                {
                    otc.writeUTF(x + "is not Prime");
                }
            }
        }
        catch(Exception e)
        {
            System.out.println(e.toString());
        }
    }
}

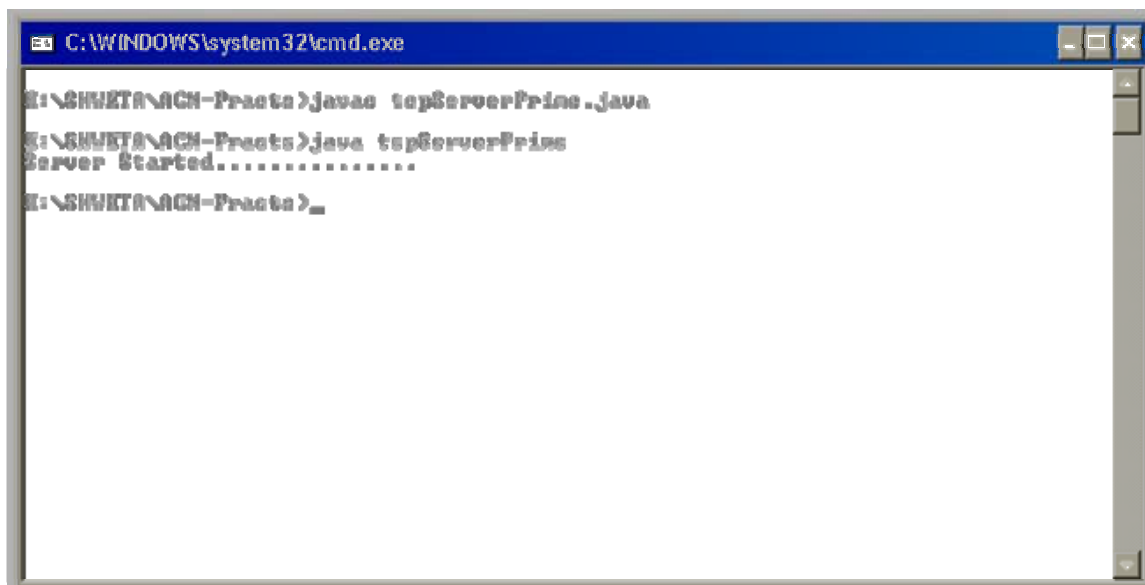
```

OUTPUT :



```
C:\WINDOWS\system32\cmd.exe

E:\SHWETA\ACM-Practs>javac toyClientPrime.java
E:\SHWETA\ACM-Practs>java toyClientPrime
Enter a number :
11
11 is Prime
E:\SHWETA\ACM-Practs>
```



```
C:\WINDOWS\system32\cmd.exe

E:\SHWETA\ACM-Practs>javac toyServerPrime.java
E:\SHWETA\ACM-Practs>java toyServerPrime
Server Started.....
E:\SHWETA\ACM-Practs>
```

Pract 2 – D

/*Create server that will find length of the string*/

```
import java.net.*;
import java.io.*;
import java.lang.*;

class tcpClientLength
{
    public static void main(String args[])
    {
        try
        {
            String str,str1;
            Socket cs = new Socket("LocalHost",8002);

            BufferedReader infu = new BufferedReader(new
            InputStreamReader(System.in));
            BufferedReader infs = new BufferedReader(new
            InputStreamReader(cs.getInputStream()));

            DataInputStream in = new DataInputStream(cs.getInputStream());
            DataOutputStream out = new
            DataOutputStream(cs.getOutputStream());

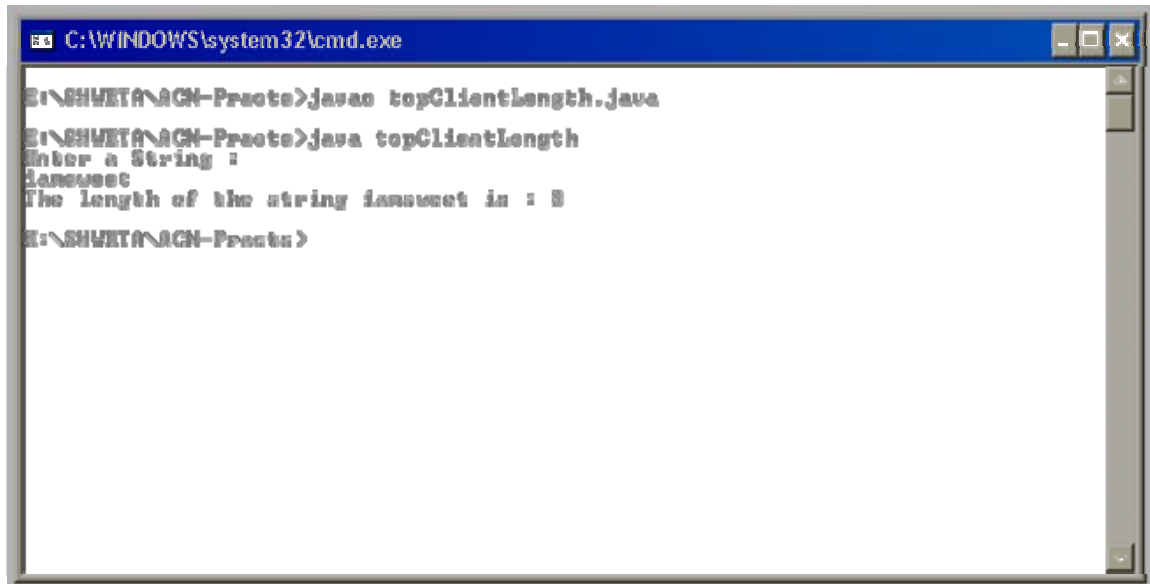
            System.out.println("Enter a String : ");
            str = infu.readLine();
            out.writeBytes(str + "\n");
            str1 = infs.readLine();
            System.out.println("The length of the string " + str + " is : " + str1);
            cs.close();
        }
        catch(Exception e)
        {
            System.out.println(e.toString());
        }
    }
}
```

```
/*Create server that will find length of the string*/

import java.net.*;
import java.io.*;
import java.lang.*;
class tcpServerLength
{
    public static void main(String args[])
    {
        try
        {
            String str,str1;
            ServerSocket ws = new ServerSocket(8002);
            System.out.println("Server Started.....");
            Socket cons = ws.accept();
            BufferedReader ifc = new BufferedReader(new
            InputStreamReader(cons.getInputStream()));

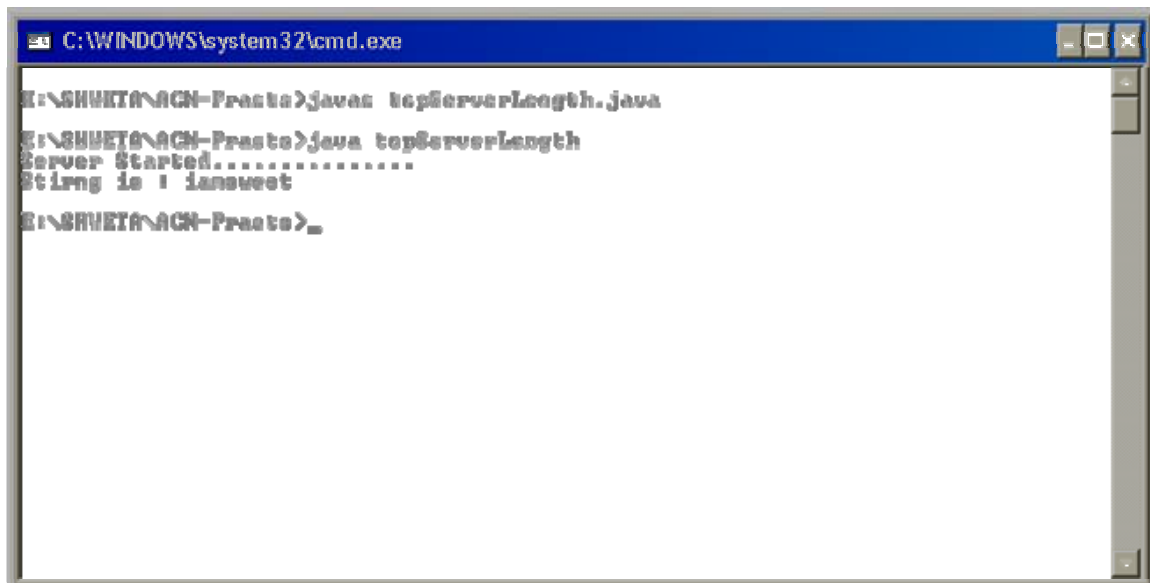
            DataOutputStream otc = new
            DataOutputStream(cons.getOutputStream());
            str = ifc.readLine();
            System.out.println("String is : " + str);
            int len=str.length();
            str1 = len + "\n";
            otc.writeBytes(str1);
        }
        catch(Exception e)
        {
            System.out.println(e.toString());
        }
    }
}
```

OUTPUT :



```
C:\WINDOWS\system32\cmd.exe

E:\SHWETA\AGN-Practo>javac topClientLength.java
E:\SHWETA\AGN-Practo>java topClientLength
Enter a String :
iansweet
The length of the string iansweet is : 8
E:\SHWETA\AGN-Practo>
```



```
C:\WINDOWS\system32\cmd.exe

E:\SHWETA\AGN-Practo>javac topServerLength.java
E:\SHWETA\AGN-Practo>java topServerLength
Server Started.....
String is : iansweet
E:\SHWETA\AGN-Practo>
```

Pract 3 – A

/*Program which calculate factorial of a number*/

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

public class udpClientFact
{
    udpClientFact()
    {
        try
        {
            DatagramSocket ds = new DatagramSocket(1000);
            byte b[] = new byte[1024];
            byte b1[] = new byte[1024];
            BufferedReader br = new BufferedReader(new
            InputStreamReader(System.in));
            System.out.println("Enter a number : ");
            String num = br.readLine();
            b=num.getBytes();
            DatagramPacket dp = new
            DatagramPacket(b,b.length,InetAddress.getLocalHost(),2000);
            ds.send(dp);
            DatagramPacket dp1 = new DatagramPacket(b1,b1.length);
            ds.receive(dp1);
            String str = new String(dp1.getData(),0,dp1.getLength());
            System.out.println(str);
        }
        catch(Exception e)
        {
            e.printStackTrace();
        }
    }
    public static void main(String args[])
    {
        udpClientFact ucf = new udpClientFact();
    }
}
```

```


/*Program which calculate factorial of a number*/

import java.io.*;
import java.net.*;

public class udpServerFact
{
    udpServerFact()
    {
        try
        {
            DatagramSocket ds = new DatagramSocket(2000);
            byte b[] = new byte[1024];
            byte b1[] = new byte[1024];
            DatagramPacket dp = new DatagramPacket(b,b.length);
            ds.receive(dp);
            String str = new String(dp.getData(),0,dp.getLength());
            System.out.println(str);
            int a= Integer.parseInt(str);
            int f = 1, i;
            String s= new String();
            for(i=1;i<=a;i++)
            {
                f=f*i;
            }
            s=Integer.toString(f);
            String str1 = "The Factorial of " + str + " is : " + f;
            b1 = str1.getBytes();
            DatagramPacket dp1 = new
            DatagramPacket(b1,b1.length,InetAddress.getLocalHost(),1000);
            ds.send(dp1);
        }
        catch(Exception e)
        {
            e.printStackTrace();
        }
    }
    public static void main(String args[])
    {
        udpServerFact ucf = new udpServerFact();
    }
}

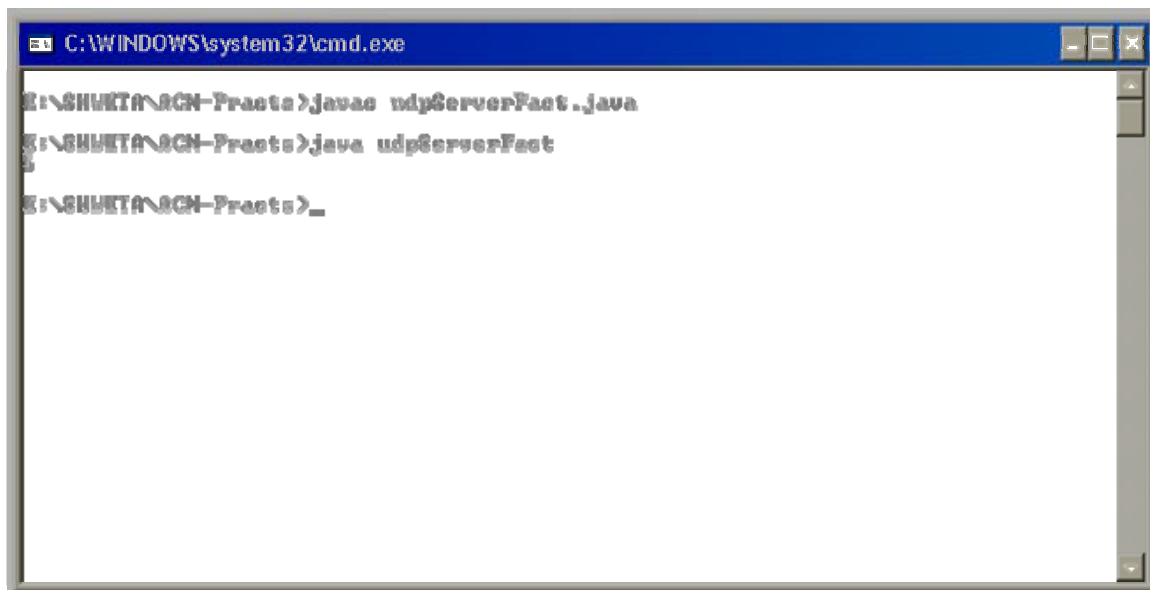
```

OUTPUT :



```
C:\WINDOWS\system32\cmd.exe

E:\SHWETA\JCN-Practs>javac udpClientFact.java
E:\SHWETA\JCN-Practs>java udpClientFact
Enter a number :
5
The Factorial of 5 is : 120
E:\SHWETA\JCN-Practs>
```



```
C:\WINDOWS\system32\cmd.exe

E:\SHWETA\JCN-Practs>javac udpServerFact.java
E:\SHWETA\JCN-Practs>java udpServerFact
E:\SHWETA\JCN-Practs>_
```

Pract 3 – B

```
/*program to find greater number*/
```

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

```
public class udpClientMax
```

```
{
    udpClientMax()
    {
        try
        {
            DatagramSocket ds = new DatagramSocket(3000);
            byte b[] = new byte[1024];
            byte b1[] = new byte[1024];
            byte b2[] = new byte[1024];

            BufferedReader br = new BufferedReader(new InputStreamReader(System.in));
            System.out.println("Enter the first number : ");
            String num1 = br.readLine();
            b=num1.getBytes();
            DatagramPacket dp = new
            DatagramPacket(b,b.length,InetAddress.getLocalHost(),4000);
            ds.send(dp);
            System.out.println("Enter the second number : ");
            String num2 = br.readLine();
            b1=num2.getBytes();
            DatagramPacket dp1 = new
            DatagramPacket(b1,b1.length,InetAddress.getLocalHost(),4000);
            ds.send(dp1);

            DatagramPacket dp2 = new DatagramPacket(b2,b2.length);
            ds.receive(dp2);
            String str = new String(dp2.getData(),0,dp2.getLength());
            System.out.println(str);
        }
        catch(Exception e)
        {
            e.printStackTrace();
        }
    }
    public static void main(String args[]) {
        udpClientMax max = new udpClientMax    ();
    }
}
```

```

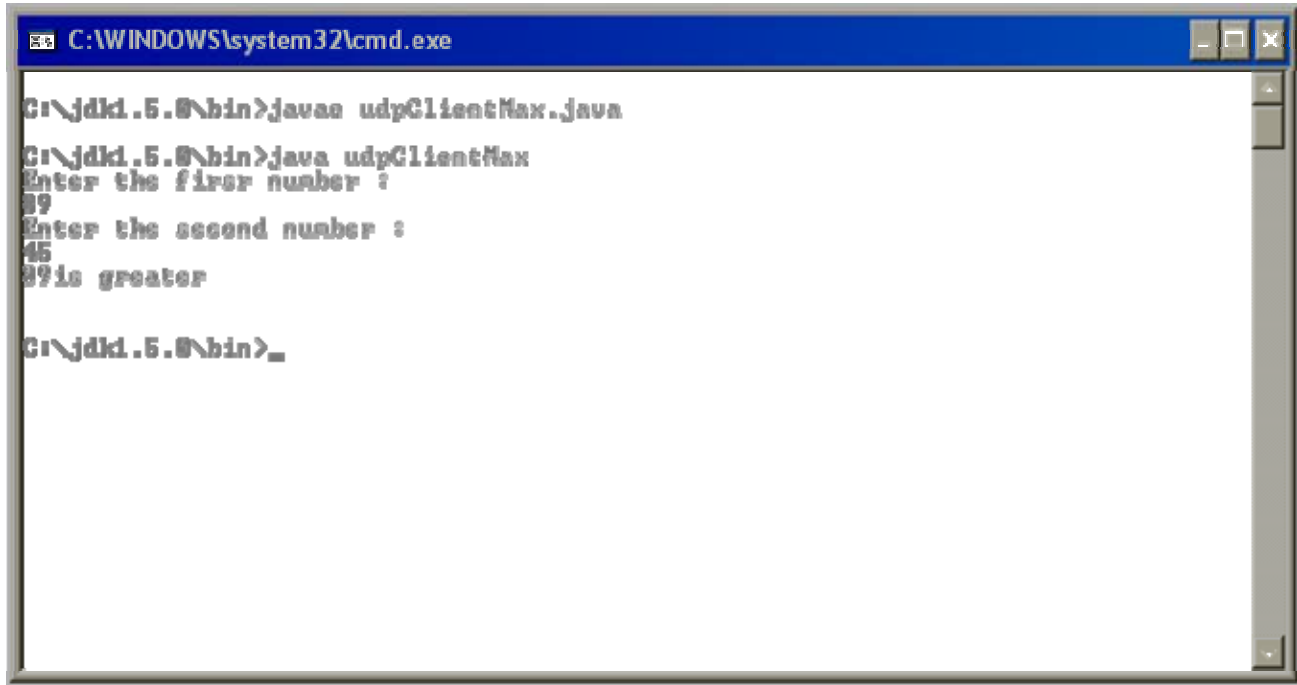
/*program to find greater number*/

import java.io.*;
import java.net.*;

public class udpServerMax{
    udpServerMax(){
        try    {
            DatagramSocket ds = new DatagramSocket(4000);
            byte b[] = new byte[1024];
            byte b1[] = new byte[1024];
            byte b2[] = new byte[1024];
            String str2 = new String();
            DatagramPacket dp = new DatagramPacket(b,b.length);
            ds.receive(dp);
            String str = new String(dp.getData(),0,dp.getLength());
            int num1 = Integer.parseInt(str);
            DatagramPacket dp1 = new DatagramPacket(b1,b1.length);
            ds.receive(dp1);
            String str1 = new String(dp1.getData(),0,dp1.getLength());
            int num2 = Integer.parseInt(str1);
            if(num1>num2){
                str2 = num1 + "is greater \n";
            }
            else if(num2>num1){
                str2 = num2 + "is greater \n";
            }
            else
            {
                str2 = num1 + " and " + num2 + "both are same";
            }
            b2 = str2.getBytes();
            DatagramPacket dp2 = new
            DatagramPacket(b2,b2.length,InetAddress.getLocalHost(),3000);
            ds.send(dp2);
        }
        catch(Exception e)    {
            e.printStackTrace();
        }
    }
    public static void main(String args[]) {
        udpServerMax max1 = new udpServerMax();
    }
}

```

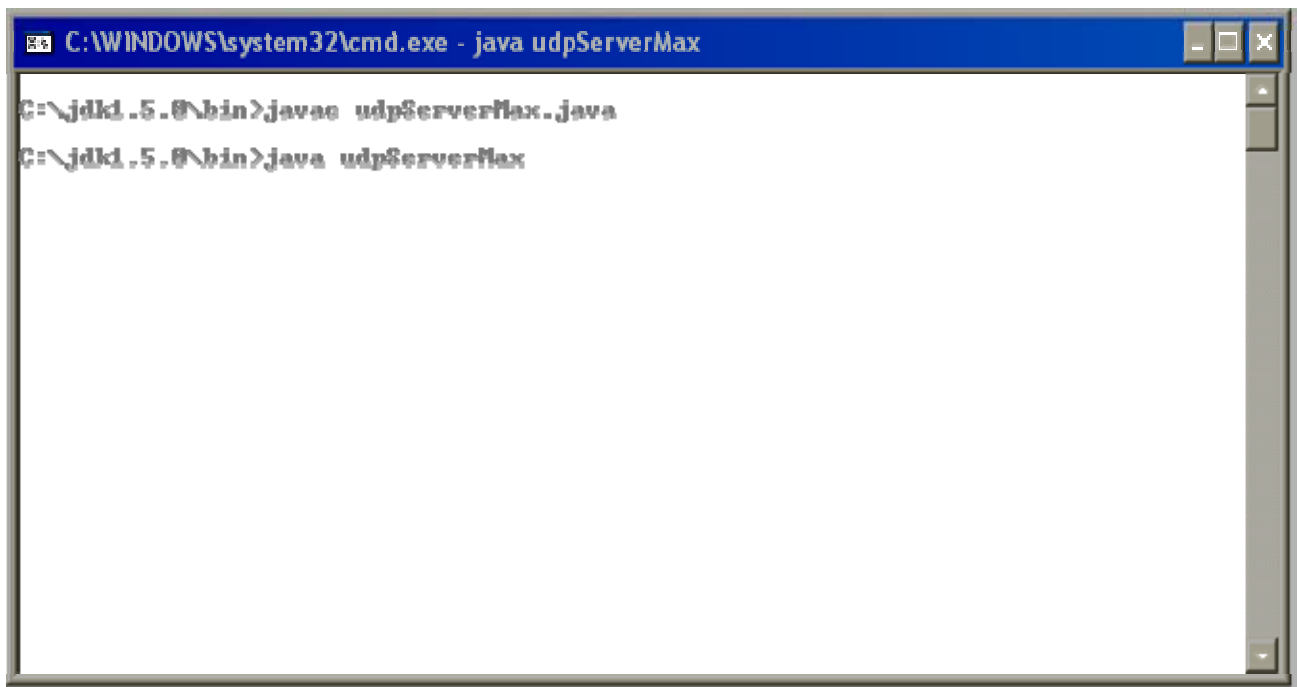
OUTPUT :



```
C:\WINDOWS\system32\cmd.exe

C:\jdk1.5.0\bin>javac udpClientMax.java
C:\jdk1.5.0\bin>java udpClientMax
Enter the first number :
39
Enter the second number :
45
39 is greater

C:\jdk1.5.0\bin>_
```



```
C:\WINDOWS\system32\cmd.exe - java udpServerMax

C:\jdk1.5.0\bin>javac udpServerMax.java
C:\jdk1.5.0\bin>java udpServerMax
```

Pract 3- C

```
/*program to find Prime number*/
```

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

```
public class udpClientPrime
```

```
{
    udpClientPrime()
    {
        try
        {
            DatagramSocket ds = new DatagramSocket(1000);
            byte b[] = new byte[1024];
            byte b1[] = new byte[1024];

            BufferedReader br = new BufferedReader(new InputStreamReader(System.in));
            System.out.println("Enter a number : ");
            String num1 = br.readLine();
            b=num1.getBytes();
            DatagramPacket dp = new
            DatagramPacket(b,b.length,InetAddress.getLocalHost(),2000);
            ds.send(dp);

            DatagramPacket dp1 = new DatagramPacket(b1,b1.length);
            ds.receive(dp1);
            String str = new String(dp1.getData(),0,dp1.getLength());
            System.out.println(str);
        }
        catch(Exception e)
        {
            e.printStackTrace();
        }
    }
    public static void main(String args[])
    {
        udpClientPrime prime = new udpClientPrime();
    }
}
```

```
/*program to find greater number*/
```

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

```
public class udpServerPrime  
{
```

```
    udpServerPrime()  
    {
```

```
        try  
        {
```

```
            DatagramSocket ds = new DatagramSocket(2000);  
            byte b[] = new byte[1024];  
            byte b1[] = new byte[1024];
```

```
            String str1 = new String();  
            DatagramPacket dp = new DatagramPacket(b,b.length);  
            ds.receive(dp);  
            String str = new String(dp.getData(),0,dp.getLength());  
            int num = Integer.parseInt(str);  
            if(num == 1 || num == 2 || num == 3)  
            {  
                str = num + " is a prime number.";  
                b1 = str1.getBytes();  
                DatagramPacket dp2 = new  
                DatagramPacket(b1,b1.length,InetAddress.getLocalHost(),1000);  
                ds.send(dp2);  
                System.exit(0);
```

```
            }  
            else  
            {
```

```
                int num2 = num/2;  
                for(int i=2;i<=num2;i++)  
                {
```

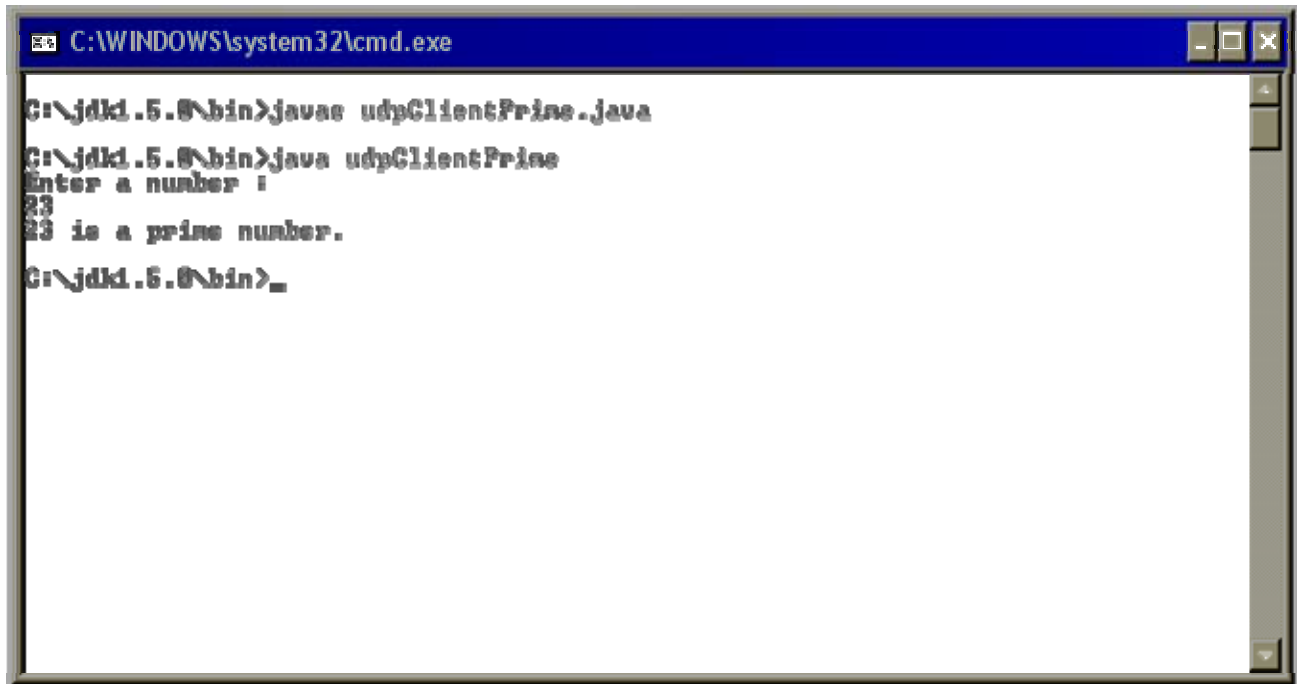
```
                    if(num%i==0)  
                    {
```

```
                        str1 = num + " is not a prime number.";  
                        b1 = str1.getBytes();  
                        DatagramPacket dp2 = new  
                        DatagramPacket(b1,b1.length,InetAddress.getLocalHost()  
                        ,1000);  
                        ds.send(dp2);  
                        System.exit(0);
```


```
                    }  
                }  
            }  
        }  
    }
```

```
        str1 = num + " is a prime number.";
        b1 = str1.getBytes();
        DatagramPacket dp2 = new
        DatagramPacket(b1,b1.length,InetAddress.getLocalHost(),1000);
        ds.send(dp2);
    }
    catch(Exception e)
    {
        e.printStackTrace();
    }
}
public static void main(String args[])
{
    udpServerPrime max1 = new udpServerPrime();
}
}
```

OUTPUT :



```
C:\WINDOWS\system32\cmd.exe
C:\jdk1.5.0\bin>javac udpClientPrime.java
C:\jdk1.5.0\bin>java udpClientPrime
Enter a number :
23
23 is a prime number.
C:\jdk1.5.0\bin>
```



```
C:\WINDOWS\system32\cmd.exe - java udpServerPrime
C:\jdk1.5.0\bin>javac udpServerPrime.java
C:\jdk1.5.0\bin>java udpServerPrime
-
```

Pract 3-D

/*program to find String Length*/

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

public class udpClientLength
{
    udpClientLength()
    {
        try
        {
            DatagramSocket ds = new DatagramSocket(1000);
            byte b[] = new byte[1024];
            byte b1[] = new byte[1024];

            BufferedReader br = new BufferedReader(new InputStreamReader(System.in));
            System.out.println("Enter a String : ");
            String str1 = br.readLine();
            b=str1.getBytes();
            DatagramPacket dp = new
            DatagramPacket(b,b.length,InetAddress.getLocalHost(),2000);
            ds.send(dp);

            DatagramPacket dp1 = new DatagramPacket(b1,b1.length);
            ds.receive(dp1);
            String str = new String(dp1.getData(),0,dp1.getLength());
            System.out.println(str);
        }
        catch(Exception e)
        {
            e.printStackTrace();
        }
    }
    public static void main(String args[])
    {
        udpClientLength len = new udpClientLength();
    }
}
```

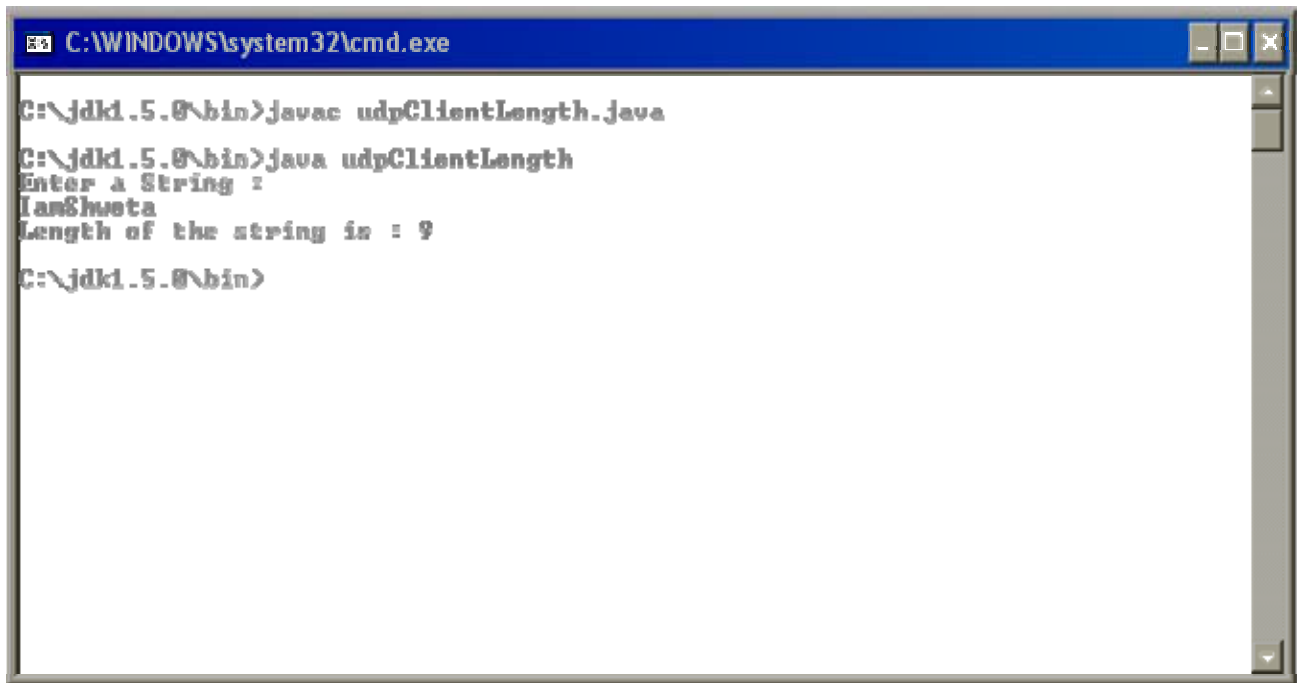
```
/*program to find length of the string*/

import java.io.*;
import java.net.*;

public class udpServerLen
{
    udpServerLen()
    {
        try
        {
            DatagramSocket ds = new DatagramSocket(2000);
            byte b[] = new byte[1024];
            byte b1[] = new byte[1024];

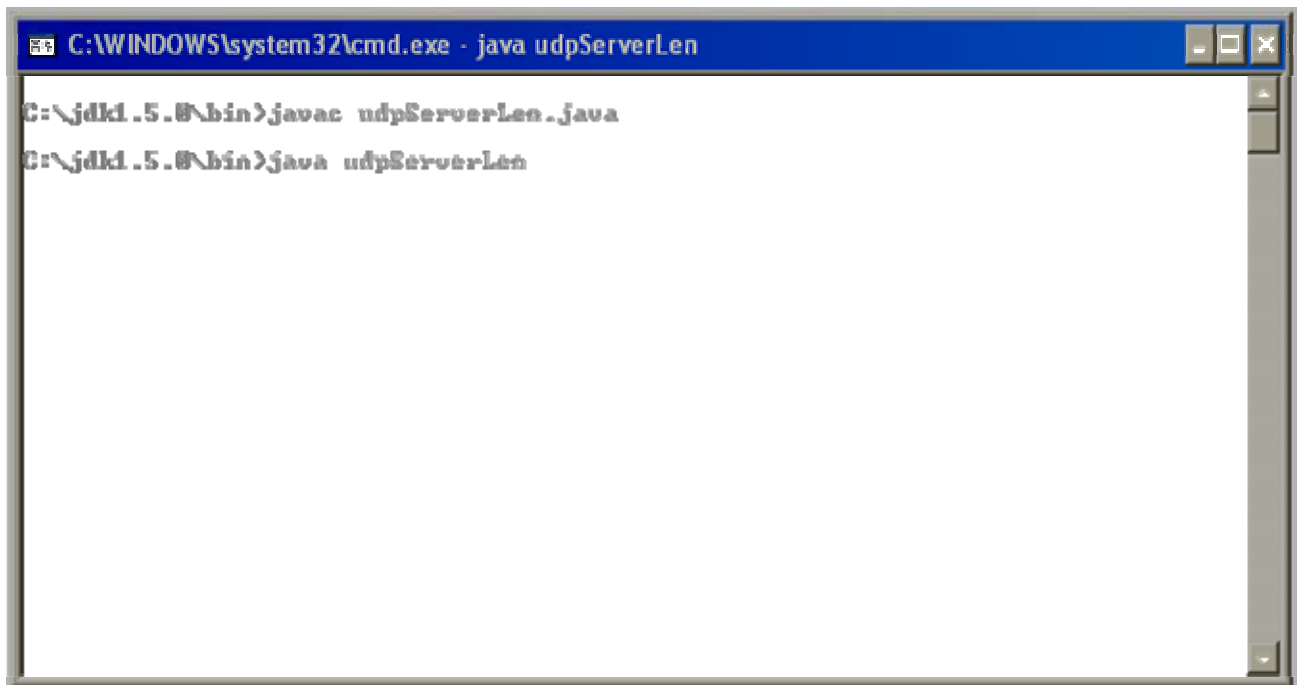
            String str1 = new String();
            DatagramPacket dp = new DatagramPacket(b,b.length);
            ds.receive(dp);
            String str = new String(dp.getData(),0,dp.getLength());
            int len = str.length();
            str1 = "Length of the string is : " + len;
            b1 = str1.getBytes();
            DatagramPacket dp2 = new
            DatagramPacket(b1,b1.length,InetAddress.getLocalHost(),1000);
            ds.send(dp2);
        }
        catch(Exception e)
        {
            e.printStackTrace();
        }
    }
    public static void main(String args[])
    {
        udpServerLen len1 = new udpServerLen();
    }
}
```

OUTPUT :



```
C:\WINDOWS\system32\cmd.exe

C:\jdk1.5.0\bin>javac udpClientLength.java
C:\jdk1.5.0\bin>java udpClientLength
Enter a String :
JanShweta
Length of the string is : 9
C:\jdk1.5.0\bin>
```



```
C:\WINDOWS\system32\cmd.exe - java udpServerLen

C:\jdk1.5.0\bin>javac udpServerLen.java
C:\jdk1.5.0\bin>java udpServerLen
```

Pract 4 – A

/*Program to print Hello to the client from server*/

```
import java.net.*;
import java.io.*;
import java.lang.*;

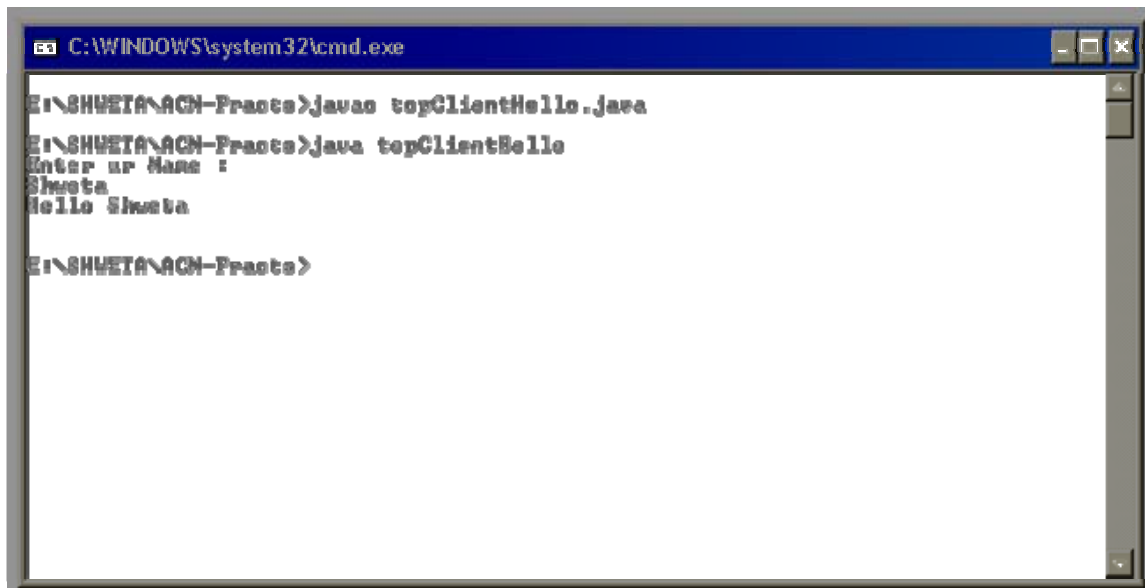
public class tcpClientHello
{
    public static void main(String args[])
    {
        try
        {
            String str,nam;
            Socket cs = new Socket("localhost",5000);
            BufferedReader br = new BufferedReader(new
            InputStreamReader(cs.getInputStream()));
            BufferedReader br1 = new BufferedReader(new
            InputStreamReader(System.in));
            str = br.readLine();
            System.out.println("Enter ur Name : ");
            nam = br1.readLine();
            System.out.println(str + " " + nam + "\n");
            cs.close();
        }
        catch(Exception e)
        {
            e.printStackTrace();
        }
    }
}
```

```
/*Program to print Hello to the client from server*/

import java.net.*;
import java.io.*;
import java.lang.*;

class tcpServerHello
{
    public static void main(String args[])
    {
        System.out.println("Server Started.....");
        try
        {
            String str,nam;
            ServerSocket ws = new ServerSocket(5000);
            Socket cons = ws.accept();
            DataOutputStream outs = new
            DataOutputStream(cons.getOutputStream());
            str = "Hello";
            outs.writeBytes(str + "\n");
        }
        catch(Exception e)
        {
            e.printStackTrace();
        }
    }
}
```

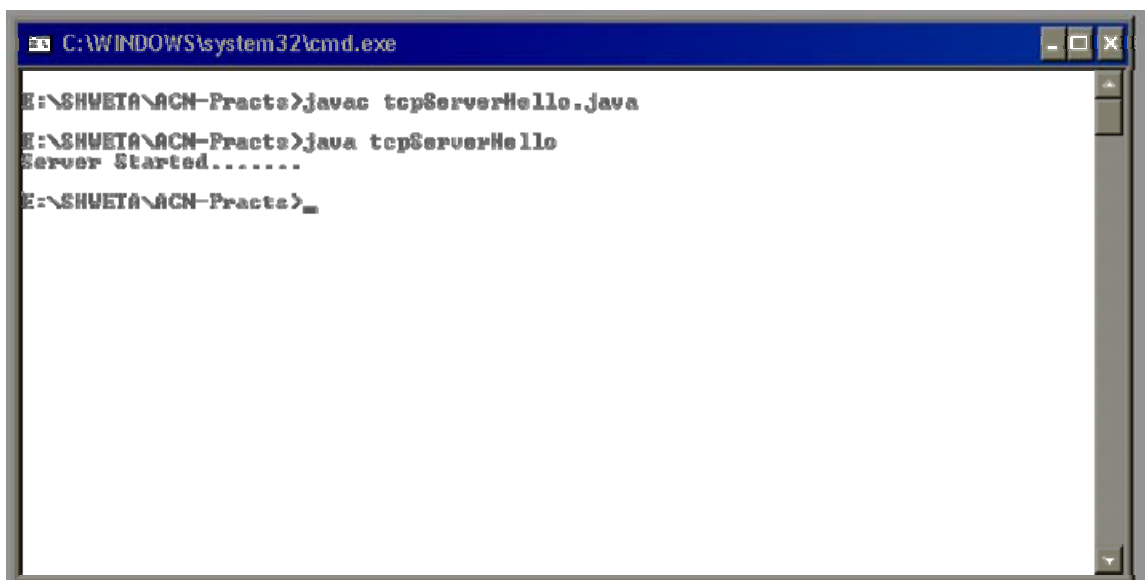
OUTPUT :



```
C:\WINDOWS\system32\cmd.exe

E:\SHWETA\ACN-Practs>javac tcpClientHello.java
E:\SHWETA\ACN-Practs>java tcpClientHello
Enter ur Name :
Shweta
Hello Shweta

E:\SHWETA\ACN-Practs>
```



```
C:\WINDOWS\system32\cmd.exe

E:\SHWETA\ACN-Practs>javac tcpServerHello.java
E:\SHWETA\ACN-Practs>java tcpServerHello
Server Started.....

E:\SHWETA\ACN-Practs>_
```

Pract 4 – B

/* On starting Client Program ur server should display time */

```
import java.net.*;
import java.io.*;
import java.lang.*;

public class tcpClientTime
{
    public static void main(String args[])
    {
        try
        {
            String str,nam;
            Socket cs = new Socket("localhost",8001);

            BufferedReader br = new BufferedReader(new
            InputStreamReader(cs.getInputStream()));
            str = br.readLine();
            System.out.println(str + "\n");
            cs.close();
        }
        catch(Exception e)
        {
            e.printStackTrace();
        }
    }
}
```

```
/* On starting Client Program ur server should display time */
```

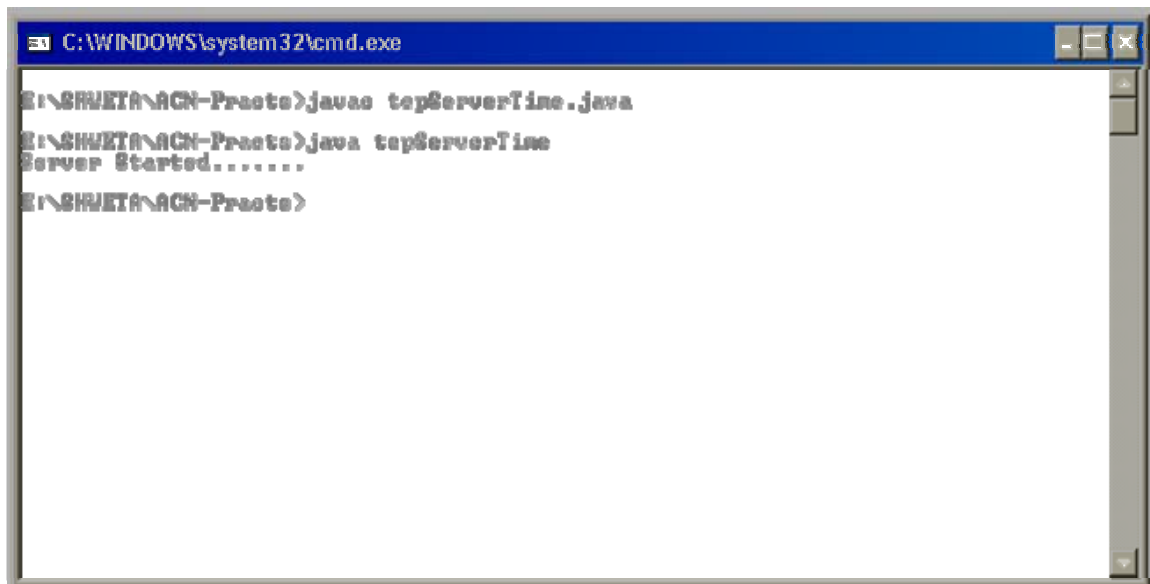
```
import java.net.*;
import java.io.*;
import java.lang.*;
import java.util.*;

class tcpServerTime
{
    public static void main(String args[])
    {
        System.out.println("Server Started.....");
        try
        {
            String str,nam;
            ServerSocket ws = new ServerSocket(8001);
            Socket cons = ws.accept();
            DataOutputStream outs = new
            DataOutputStream(cons.getOutputStream());
            Date d = new Date();
            str = d.toString();
            outs.writeBytes(str+"\n");
        }
        catch(Exception e)
        {
            e.printStackTrace();
        }
    }
}
```

OUTPUT :



```
C:\WINDOWS\system32\cmd.exe
E:\SHWETA\ACN-Pract>javac topClientTime.java
E:\SHWETA\ACN-Pract>java topClientTime
Tue Oct 17 22:28:01 IST 2006
E:\SHWETA\ACN-Pract>
```



```
C:\WINDOWS\system32\cmd.exe
E:\SHWETA\ACN-Pract>javac topServerTime.java
E:\SHWETA\ACN-Pract>java topServerTime
Server Started.....
E:\SHWETA\ACN-Pract>
```

Pract 5-A

```
/*program to Print Hello to client*/
```

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

```
public class udpClientHello
```

```
{
    udpClientHello()
    {
        try
        {
            DatagramSocket ds = new DatagramSocket(1000);
            byte b[] = new byte[1024];

            DatagramPacket dp = new DatagramPacket(b,b.length);
            ds.receive(dp);
            String str = new String(dp.getData(),0,dp.getLength());
            System.out.println(str);
        }
        catch(Exception e)
        {
            e.printStackTrace();
        }
    }
    public static void main(String args[])
    {
        udpClientHello helo = new udpClientHello();
    }
}
```

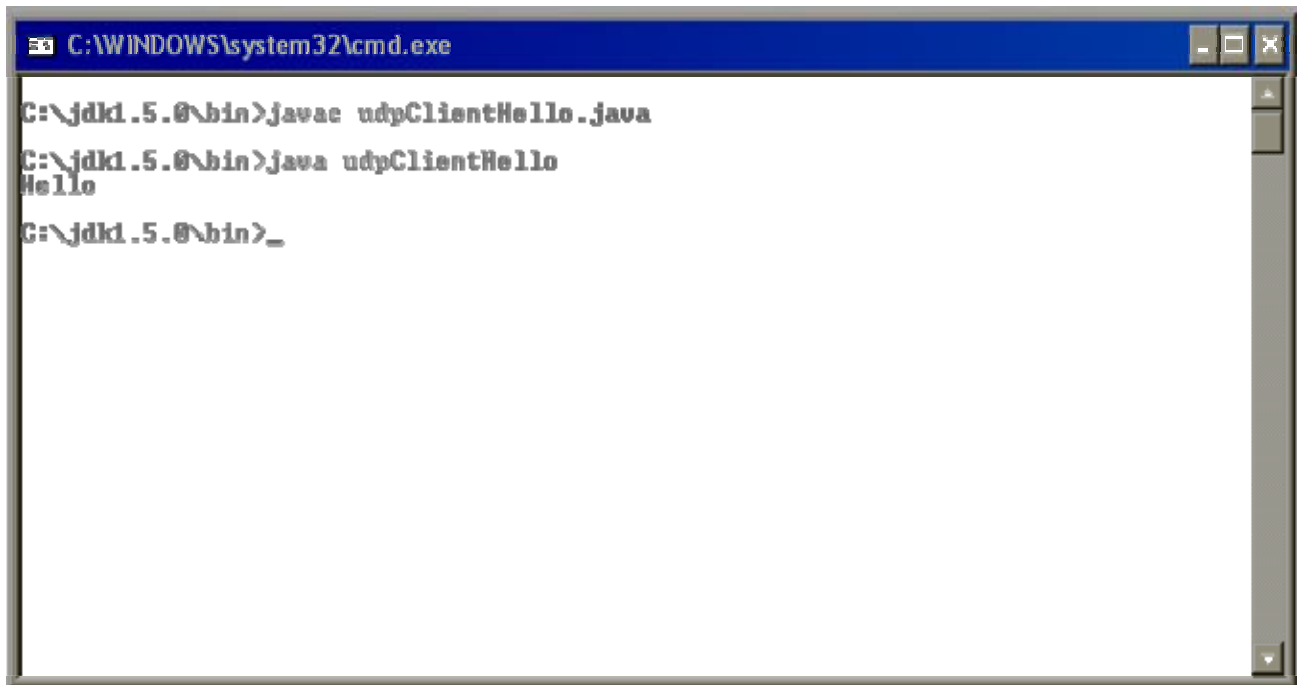
```
/*program to Print Hello to client*/

import java.io.*;
import java.net.*;

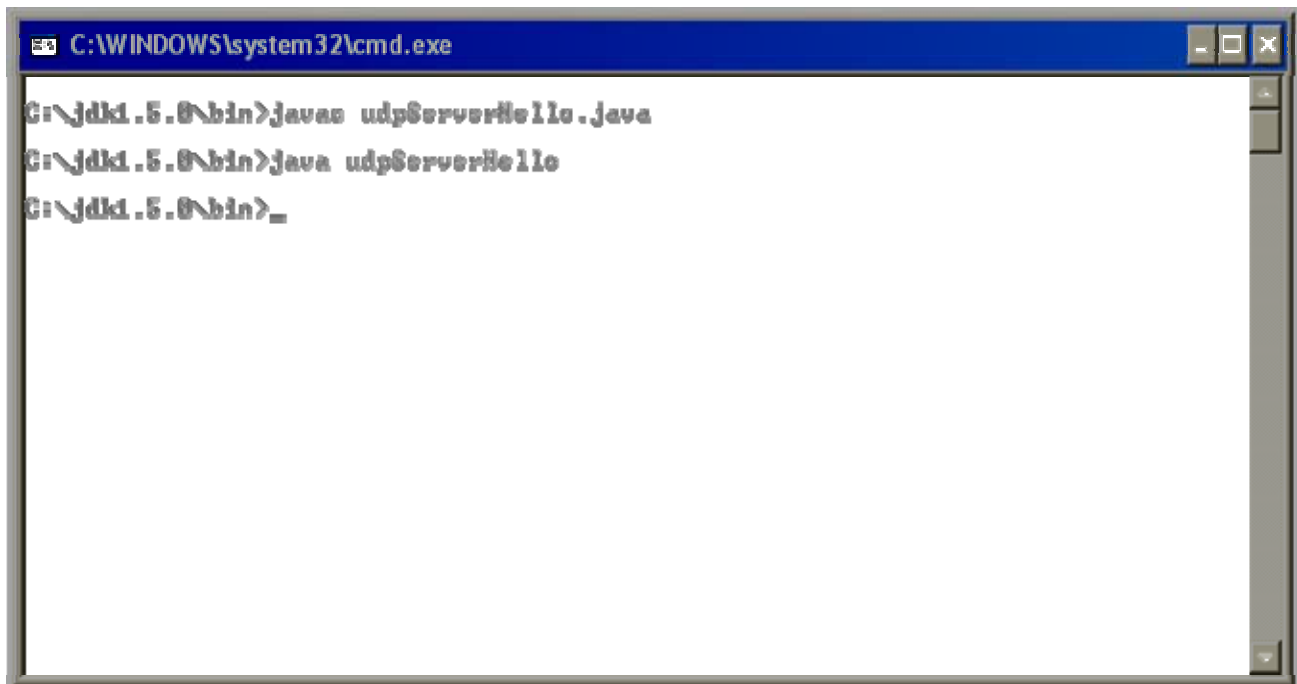
public class udpServerHello
{
    udpServerHello()
    {
        try
        {
            DatagramSocket ds = new DatagramSocket(2000);
            byte b[] = new byte[1024];

            String str = "Hello";
            b = str.getBytes();
            DatagramPacket dp = new
            DatagramPacket(b,b.length,InetAddress.getLocalHost(),1000);
            ds.send(dp);
        }
        catch(Exception e)
        {
            e.printStackTrace();
        }
    }
    public static void main(String args[])
    {
        udpServerHello helo1 = new udpServerHello();
    }
}
```

OUTPUT :



```
C:\WINDOWS\system32\cmd.exe
C:\jdk1.5.0\bin>javac udpClientHello.java
C:\jdk1.5.0\bin>java udpClientHello
Hello
C:\jdk1.5.0\bin>_
```



```
C:\WINDOWS\system32\cmd.exe
C:\jdk1.5.0\bin>javac udpServerHello.java
C:\jdk1.5.0\bin>java udpServerHello
C:\jdk1.5.0\bin>_
```

Pract 5 – B

```
/*program to Print Hello to client*/

import java.io.*;
import java.net.*;

public class udpClientTime
{
    udpClientTime()
    {
        try
        {
            DatagramSocket ds = new DatagramSocket(1000);
            byte b[] = new byte[1024];
            DatagramPacket dp = new DatagramPacket(b,b.length);
            ds.receive(dp);
            String str = new String(dp.getData(),0,dp.getLength());
            System.out.println("\n" + str);
        }
        catch(Exception e)
        {
            e.printStackTrace();
        }
    }
    public static void main(String args[])
    {
        udpClientTime tim = new udpClientTime();
    }
}
```

```
/*program to Print Hello to client*/
```

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

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

```
import java.util.*;
```

```
public class udpServerTime
```

```
{
```

```
    udpServerTime()
```

```
    {
```

```
        try
```

```
        {
```

```
            DatagramSocket ds = new DatagramSocket(2000);
```

```
            byte b[] = new byte[1024];
```

```
            Date d = new Date();
```

```
            String str = d.toString();
```

```
            b = str.getBytes();
```

```
            DatagramPacket dp = new DatagramPacket(b,b.length,InetAddress.getLocalHost(),10000);
```

```
            ds.send(dp);
```

```
        }
```

```
        catch(Exception e)
```

```
        {
```

```
            e.printStackTrace();
```

```
        }
```

```
    }
```

```
    public static void main(String args[])
```

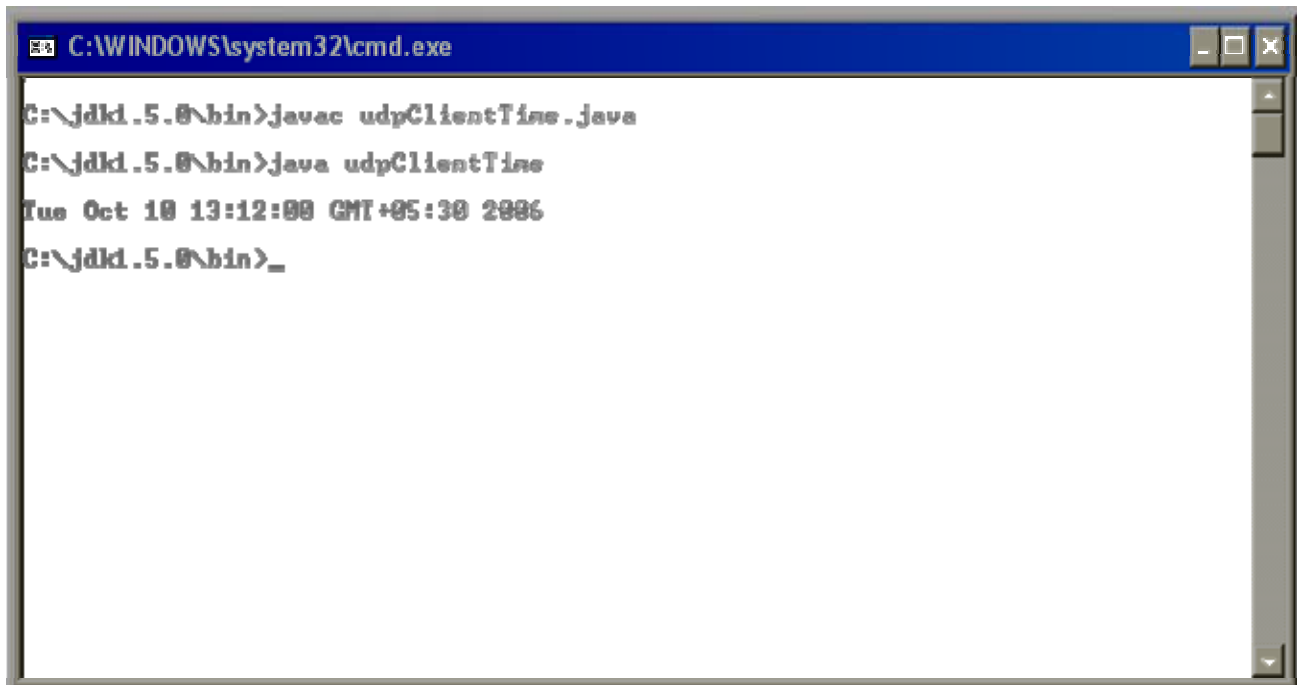
```
    {
```

```
        udpServerTime tim1 = new udpServerTime();
```

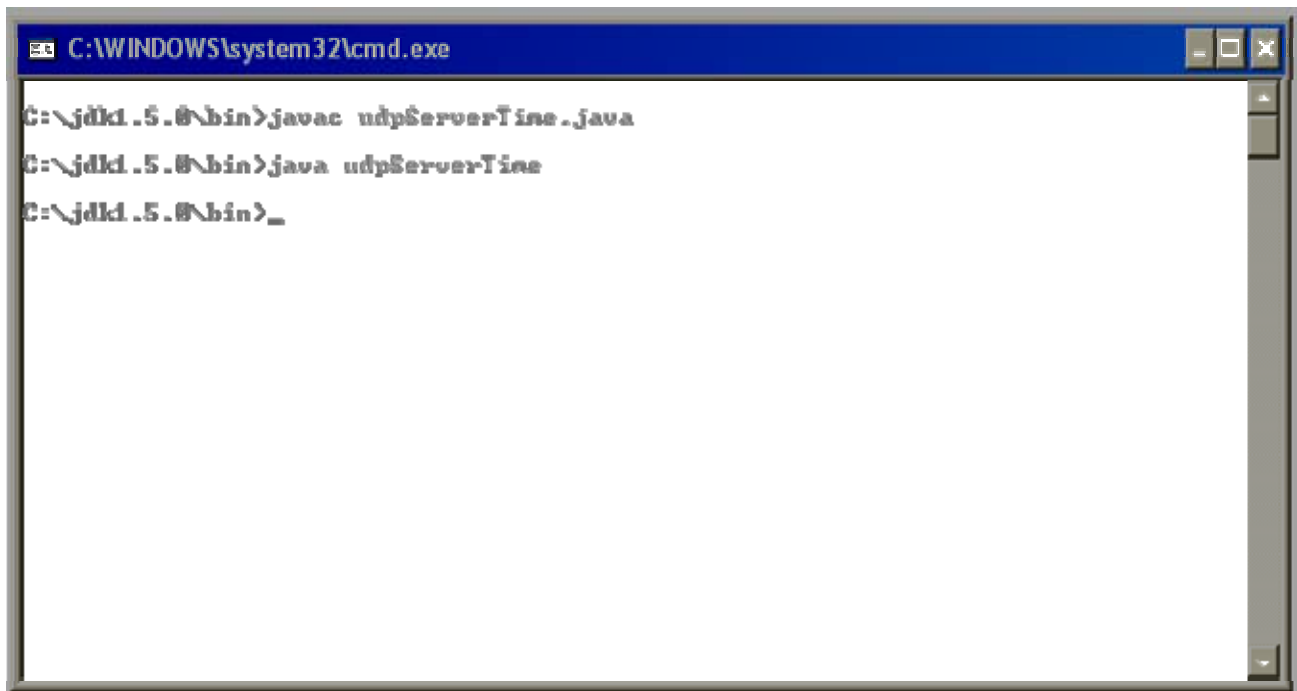
```
    }
```

```
}
```

OUTPUT :



```
C:\WINDOWS\system32\cmd.exe
C:\jdk1.5.0\bin>javac udpClientTime.java
C:\jdk1.5.0\bin>java udpClientTime
Tue Oct 10 13:12:00 GMT+05:30 2006
C:\jdk1.5.0\bin>_
```



```
C:\WINDOWS\system32\cmd.exe
C:\jdk1.5.0\bin>javac udpServerTime.java
C:\jdk1.5.0\bin>java udpServerTime
C:\jdk1.5.0\bin>_
```