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Class: 3rd year(5th sem)

Lab 5: WAP to implement Client Server to send and receive text messages from client and server.

Answer:

Source code:

Server: -

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

public class server{

    public static void main(String[] args){

        try{

            ServerSocket server = new ServerSocket(8080);

            Socket s = server.accept();

            DataInputStream in = new DataInputStream(s.getInputStream());

            DataOutputStream out = new DataOutputStream(s.getOutputStream());

            BufferedReader br = new BufferedReader(new InputStreamReader(System.in));

            String str_recieve="",str_send="";

            while(!str_recieve.equals("stop")){

                str_recieve = in.readUTF();

                if(str_recieve.equals("stop")){
                    break;
                }

                System.out.println("Client: "+ str_recieve);

                str_send = br.readLine();

                out.writeUTF(str_send);

                out.flush();
            }
        }
    }
}
```

```

System.out.println("Client: "+ str_recieve);

out.close();

in.close();

server.close();

}catch(Exception e){System.out.println("Connection Ended");

}

}

```

Client: -

```

import java.io.*;

import java.net.*;

public class client {

public static void main(String[] args) {

try{

Socket s = new Socket("localhost",8080);

DataOutputStream out = new DataOutputStream(s.getOutputStream());

DataInputStream in = new DataInputStream(s.getInputStream());

BufferedReader br = new BufferedReader(new InputStreamReader(System.in));

String str_send="",str_recieve="";

while(!str_recieve.equals("stop")){

str_send = br.readLine();

out.writeUTF(str_send);

out.flush();

str_recieve = in.readUTF();

System.out.println("Server: "+str_recieve);

}

out.close();

s.close();

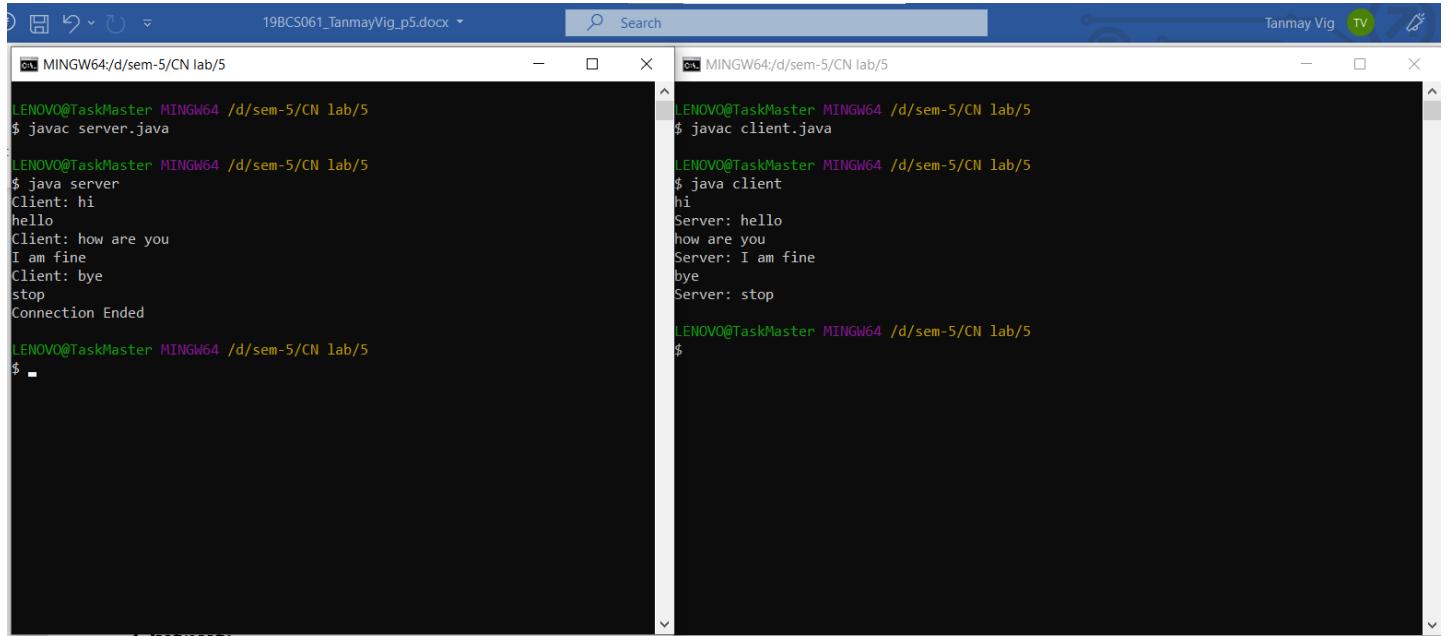
}catch(Exception e){System.out.println("Connection Ended");

}

}

```

Output:



The screenshot shows two terminal windows side-by-side, both titled "MINGW64 /d/sem-5/CN lab/5".

The left terminal window contains the following session:

```
LENOVO@TaskMaster MINGW64 /d/sem-5/CN lab/5
$ javac server.java
LENOVO@TaskMaster MINGW64 /d/sem-5/CN lab/5
$ java server
Client: hi
hello
Client: how are you
I am fine
Client: bye
stop
Connection Ended
LENOVO@TaskMaster MINGW64 /d/sem-5/CN lab/5
$
```

The right terminal window contains the following session:

```
LENOVO@TaskMaster MINGW64 /d/sem-5/CN lab/5
$ javac client.java
LENOVO@TaskMaster MINGW64 /d/sem-5/CN lab/5
$ java client
hi
Server: hello
how are you
Server: I am fine
bye
Server: stop
LENOVO@TaskMaster MINGW64 /d/sem-5/CN lab/5
$
```