

## Practical 2

### CLIENT SERVER COMMUNICATION:

#### SERVER CODE:

```
import java.net.*;
import java.io.*;
class Server{
    Server(int port){
        try{
            ServerSocket ss=new ServerSocket(port);
            Socket s=ss.accept();
            DataInputStream din=new DataInputStream(s.getInputStream());
            BufferedReader br=new BufferedReader(new InputStreamReader(System.in));

            String str="";
            while(!str.equals("stop")){
                str=din.readUTF();
                System.out.println("client says: "+str);
            }
            din.close();
            s.close();
            ss.close();
        }
        catch(Exception e){

        }
    }
    public static void main(String[] args){
        Server s= new Server(3333);
    }
}
```

**CLIENT CODE:**

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

public class Client
{
    private Socket soc;
    private DataOutputStream dos;
    private DataInputStream dis;

    public Client(String ipaddr,int port)
    {
        try {
            soc=new Socket(ipaddr,port);
            System.out.println("Client is connected");
            dis=new DataInputStream(System.in);
            dos=new DataOutputStream(soc.getOutputStream());

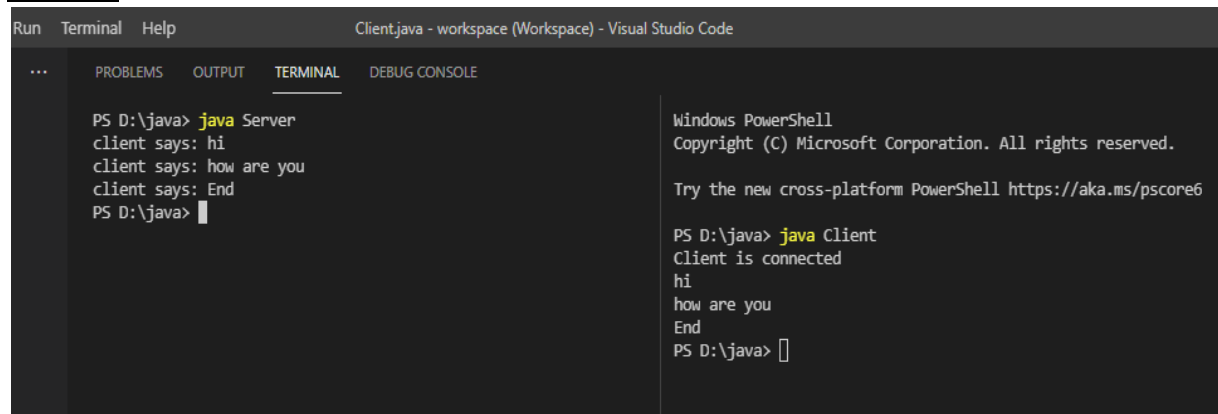
            String msg="";
            while(!msg.equals("End"))
            {
                msg=dis.readLine();
                dos.writeUTF(msg);

            }
            soc.close();
            dis.close();
            dos.close();

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

    public static void main(String ar[])
    {
        Client obj=new Client("127.0.0.1",3333);
    }
}
```

## OUTPUT:



The screenshot shows a Visual Studio Code terminal window with the title bar "Client.java - workspace (Workspace) - Visual Studio Code". The terminal has a dark background and a light-colored text. The left pane shows the output of a Java server program, and the right pane shows the output of a Java client program. The server program prints "client says: hi", "client says: how are you", and "client says: End". The client program prints "Client is connected", "hi", "how are you", and "End".

```
Run  Terminal  Help  Client.java - workspace (Workspace) - Visual Studio Code

...  PROBLEMS  OUTPUT  TERMINAL  DEBUG CONSOLE

PS D:\java> java Server
client says: hi
client says: how are you
client says: End
PS D:\java>

Windows PowerShell
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Try the new cross-platform PowerShell https://aka.ms/pscore6

PS D:\java> java Client
Client is connected
hi
how are you
End
PS D:\java>
```