

Echo server programming using java:

Source code for Server:

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

public class EServer {
    public static void main(String args[]) {
        ServerSocket s = null;
        String line;
        DataInputStream is;
        PrintStream ps;
        Socket c = null;
        try {
            s = new ServerSocket(9000);
        } catch (IOException e) {
            System.out.println(e);
        }
        try {
            c = s.accept();
            is = new DataInputStream(c.getInputStream());
            ps = new PrintStream(c.getOutputStream());
            while (true) {
                line = is.readLine();
                ps.println(line);
            }
        } catch (IOException e) {
            System.out.println(e);
        }
    }
}
```

Source code for Client:

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

public class EClient {
    public static void main(String arg[]) {
        Socket c = null;
        String line;
        DataInputStream is, is1;
        PrintStream os;
        try {
            InetAddress ia = InetAddress.getLocalHost();
            c = new Socket(ia, 9000);
        } catch (IOException e) {
            System.out.println(e);
        }
        try {
            os = new PrintStream(c.getOutputStream());
            is = new DataInputStream(System.in);
            is1 = new DataInputStream(c.getInputStream());
            while (true) {
                System.out.println("Client:");
                line = is.readLine();
                os.println(line);
                System.out.println("Server:" + is1.readLine());
            }
        } catch (IOException e) {
            System.out.println("Socket Closed!");
        }
    }
}
```

Output:

For Server:

```
Desktop — java EServer — 59x18
untitled folder
wekafiles
[Vetris-MacBook-Air:~ vetri$ cd Desktop
[Vetris-MacBook-Air:Desktop vetri$ ls
ASSIGNMENT.pdf
AndroidStudio materials
EClient.class
EClient.java
EServer.class
EServer.java
Folder
one.c
~$4.2 Software Testing Techniques.pptx
[Vetris-MacBook-Air:Desktop vetri$ javac EServer.java
Note: EServer.java uses or overrides a deprecated API.
Note: Recompile with -Xlint:deprecation for details.
[Vetris-MacBook-Air:Desktop vetri$ java EServer
```

For Client:

```
Desktop — java EClient — 67x18
AndroidStudio materials
EClient.class
EClient.java
EServer.class
EServer.java
Folder
one.c
~$4.2 Software Testing Techniques.pptx
[Vetris-MacBook-Air:Desktop vetri$ javac EClient.java
Note: EClient.java uses or overrides a deprecated API.
Note: Recompile with -Xlint:deprecation for details.
[Vetris-MacBook-Air:Desktop vetri$ java EClient
Client:
Hai
Server:Hai
Client:
This is Echo message from server!!!
Server:This is Echo message from server!!!
```