

3) Man musste bei hostName die IP-Adresse des Partners (wo der Server läuft) eingeben.

```
Socket echoServerSocket = null;  
String hostName = "172.17.211.208";  
int portNumber = 6014;
```

4) Weil wir nur eine Variable für den Client haben.

```
Socket clientSocket = null;
```

5)

Server:

```
        outToClient.println("Hallo! Wie heißt du?");  
        while ((inputLine = inFromClient.nextLine()) != null) {  
            if (clientName == null) {  
                clientName = inputLine;  
                outToClient.println("Hallo " + clientName + "!");  
            } else {  
                System.out.println("Received >" + inputLine + "<");  
                outToClient.println(clientName + ": " + inputLine);  
            }  
        }  
    }  
}
```

Client:

```
        System.out.println("Enter a line for sending to the EchoServer ...");  
        String userInput;  
        System.out.println(inFromServer.nextLine());  
        while ((userInput = stdIn.nextLine()) != null) {  
            outToServer.println(userInput);  
            System.out.println(inFromServer.nextLine());  
        }  
    }  
}
```

Output:

```
EchoServer (run) × EchoClient (run) ×  
run:  
Enter a line for sending to the EchoServer ...  
Hallo! Wie heißt du?  
Apfelkuchen  
Hallo Apfelkuchen!  
Hi  
Apfelkuchen: Hi  
Ho  
Apfelkuchen: Ho
```

6)

Client:

```
echoServerSocket = new Socket(hostName, portNumber);
PrintWriter outToServer = new PrintWriter(echoServerSocket.getOutputStream(), true);
Scanner inFromServer = new Scanner(echoServerSocket.getInputStream());
Scanner stdIn = new Scanner(System.in);

String exitMessage = "x";
System.out.println("Enter a line for sending to the EchoServer ...");
String userInput;
System.out.println(inFromServer.nextLine());
while ((userInput = stdIn.nextLine()) != null) {
    outToServer.println(userInput);
    System.out.println(inFromServer.nextLine());
    if (userInput.equalsIgnoreCase(exitMessage)) {
        break;
    }
}

echoServerSocket.close();
```

Server:

```
String clientName = null;
clientSocket = serverSocket.accept();
System.out.println("Connection established with " + clientSocket.getRemoteSocketAddress());

PrintWriter outToClient = new PrintWriter(clientSocket.getOutputStream(), true);

Scanner inFromClient = new Scanner(clientSocket.getInputStream());
String inputLine;
String exitMessage = "x";
outToClient.println("Hallo! Wie heit du?");
while ((inputLine = inFromClient.nextLine()) != null) {
    if (clientName == null) {
        clientName = inputLine;
        outToClient.println("Hallo " + clientName + "!");
    } else if (inputLine.equalsIgnoreCase(exitMessage)) {
        outToClient.println("Auf wiedersehen " + clientName + "!");
        clientSocket.close();
        break;
    } else {
        System.out.println("Received >" + inputLine + "<");
        outToClient.println(clientName + ": " + inputLine);
    }
}
}while(true);
```

Ausgabe:

```
Enter a line for sending to the EchoServer ...
Hallo! Wie heit du?
sadsa
Hallo sadsa!
x
Auf wiedersehen sadsa!
BUILD SUCCESSFUL (total time: 5 seconds)
!
```