Experiment - 2

CLIENT-SERVER COMMUNICATION USING SOCKET PROGRAMMING (UDP)

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Compiling the Program

To compile the program:

javac Server.java

javac Client.java

Running the Program

In a terminal, run the Server program. While the Server is running, run the Client program in another terminal with the correct socket address.

In the first terminal:

java Server <port>

In the second terminal, run:

java Client <host address> <port>

The client request and server response have to be typed by the user into the terminal when prompted (i.e., when seeing '>>').

The 'Exit' request from the client is used to terminate the connection. The server has to confirm this to complete the termination process. Only the client can initiate this process.

Screenshots

```
Windows PowerShell
PS D:\emilt> java Server 5000
 .d8888b.
d88P Y88b
Y88b.
 "Y888b.
            .d88b. 888d888 888 888
                                      .d88b.
                                              888d888
    "Y88b. d8P Y8b 888P"
                            888
                                 888 d8P Y8b 888P"
      "888 8888888 888
                            Y88 88P 88888888 888
Y88b d88P Y8b.
                    888
                             Y8bd8P
                                     Y8b.
                                              888
 "Y8888P"
            "Y8888 888
                                      "Y8888
                              Y88P
                                              888
[23:51:29] Server socket created. Binded to local port 5000
[23:52:13] Client Request: Hi
>> Hello
[23:52:17] Server Response: Hello
[23:52:27] Client Request: Exit
Client is waiting for exit confirmation from server...
>> Exit
[23:52:32] Server Response: Exit
Server acknowledges exit request. Server exiting.
PS D:\emilt>
 Windows PowerShell
                           Windows PowerShell
PS D:\emilt> java Client localhost 5000
 .d8888b. 888 d8b
                                      888
     Y88b 888 Y8P
                                      888
d88P
888
       888 888
                                      888
           888 888
888
                    . d88b.
                             8888b.
                                      888888
888
           888 888 d8P Y8b 888 "88b 888
       888 888 888 8888888 888
                                  888 888
888
      d88P 888 888 Y8b.
                             888
                                  888 Y88b.
Y88b
 "Y8888P"
           888 888
                    "Y8888
                             888
                                  888
                                      "Y888
[23:51:42] Client socket created. Binded to local port 52903
>> Hi
            Client Request: Hi
[23:52:13]
[23:52:17]
            Server Response: Hello
 >> Exit
[23:52:27] Client Request: Exit
Waiting for exit confirmation from server...
[23:52:32] Server Response: Exit
Server confirmation received. Client exiting.
PS D:\emilt>
```