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CS 6650
HW1 Coding Part

Client:

```
package src.homework1;

// SimpleClient.java: A simple client program.
import java.net.*;
import java.io.*;
import java.util.Scanner;

public class SimpleClient {
    public static void main(String args[]) throws
IOException {
        // Open your connection to a server, at port 32000
        // change the host to the IP of the machine you
want to connect with
        Socket s1 = new Socket("127.0.0.1",32000);
        OutputStream s1out = s1.getOutputStream();
        DataOutputStream dos = new DataOutputStream
(s1out);
        // Send a string!
        Scanner input = new Scanner(System.in);
        System.out.println("Enter text: This is my text to
be changed by the SERVER <enter>");
        String inputStr = input.nextLine();
        // truncate length of characters over 80
```

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```
        if(inputStr.length() > 80){
            inputStr = inputStr.substring(0,
Math.min(inputStr.length(), 80));
        }
        dos.writeUTF(inputStr);

        // Get an input file handle from the socket and
read the input
        InputStream s1In = s1.getInputStream();
        DataInputStream dis = new DataInputStream(s1In);
        String st = dis.readUTF();
        System.out.println("Response from server: " + st);

        // When done, just close the connection and exit
        dis.close();
        s1In.close();
        dos.close();
        s1out.close();
        s1.close();
    }
}
```

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Server:

```
package src.homework1;

// SimpleServer.java: A simple server program.
import java.net.*;
import java.io.*;
public class SimpleServer {
    public static void main(String args[]) throws
IOException {
        // Register service on port 32000
        ServerSocket s = new ServerSocket(32000);
        Socket s1 = s.accept(); // Wait and accept a
connection

        // get input from client
        InputStream s1In = s1.getInputStream();
        DataInputStream dis = new DataInputStream(s1In);
        String st = dis.readUTF();

        // reverse the order and case
        StringBuilder result = new StringBuilder();
        for(char ch: st.toCharArray()){
            if(Character.isLowerCase(ch)){
```

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```
                result.append(Character.toUpperCase(ch));
            }else{
                result.append(Character.toLowerCase(ch));
            }
        }
        String resultStr = result.reverse().toString();

        // Get a communication stream associated with the
socket
        OutputStream s1out = s1.getOutputStream();
        DataOutputStream dos = new DataOutputStream
(s1out);
        // Send a string
        dos.writeUTF(resultStr);

        // Close the connection, but not the server socket
        dis.close();
        s1In.close();
        dos.close();
        s1out.close();
        s1.close();
    }
}
```

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