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CS242 "Clack" Project Part 3
11/16/2021
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Code for the full project can be found at https://github.com/jnschmidt18/CS242_Project, as only code for some classes and their outputs are shown below.

Code for testClackClient

```
package test;
import main.ClackClient;
public class testClackClient{
   public static void main(String[] args){
       ClackClient client1 = new ClackClient("user", "host", 1234);
       ClackClient client2 = new ClackClient("user", "host", 1234);
       ClackClient client3 = new ClackClient();
       System.out.println(client1);
       System.out.println(client2);
       System.out.println(client3);
       System.out.println(client1.hashCode());
       System.out.println(client2.hashCode());
       System.out.println(client3.hashCode());
       System.out.println();
       System.out.println(client1.equals(client2));
       System.out.println(!(client2.equals(client3)));
       System.out.println(client3.equals(client3));
   }
```

Output from run of testClackClient

```
The userName for this ClackClient is: user
The hostName for this ClackClient is: host
The port for this ClackClient is: 1234
```

```
The data sent out is:
null
The data received is:
null
The connection is closed: true
The userName for this ClackClient is: user
The hostName for this ClackClient is: host
The port for this ClackClient is:
                                      1234
The data sent out is:
null
The data received is:
null
The connection is closed: true
The userName for this ClackClient is: Anon
The hostName for this ClackClient is: localhost
The port for this ClackClient is:
                                      7000
The data sent out is:
null
The data received is:
null
The connection is closed: true
-43230709
-43230709
-215010420
```

```
true
true
true
Process finished with exit code 0
```

Output from running clackServer, then running clackClient, and giving the instance of clackClient the input "m". Program was terminated by IDE, hence the exit code of 130.

```
The userName for this ClackData is:
The Data Type for this ClackData is:
This ClackData was created at:
The data for this ClackData is:

True Nov 16 11:46:00 EST 2021
The data for this ClackData is:

The data for this ClackData is:

The Nov 16 11:46:00 EST 2021
The data for this ClackData is:
```

Testing cross-computer communication, with and without specified ports Client-side:

```
PS
C:\Users\jnsch\IdeaProjects\CS242_Project\out\artifacts\ClackClientja
r> java -jar .\ClackClient.jar testName@128.153.169.252
test
test
```

Server-side:

```
PS
C:\Users\pdrus\IdeaProjects\CS242_Project\out\artifacts\ClackServer_j
ar> java -jar ClackServer.jar
The userName for this ClackData is: testName
The Data Type for this ClackData is: 2
This ClackData was created at: Tue Nov 16 12:00:01 EST 2021
The data for this ClackData is: test
```