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CS 372  
Project 4, Client / Server Chat

1)

The program is written in Python3. With server.py and battleship.py in the same directory, run the server by typing 'python' followed by a space and the name of the server file:

```
python server.py
```

Or if the system can run python files directly, just type the name of the server file:

```
server.py
```

To run the client, type 'python' followed by a space and the name of the client file while in the directory in which the client file is stored:

```
python client.py
```

Or if the system can run python files directly, just type the name of the client file:

```
client.py
```

2)

<pre>C:\Users\akim7\PycharmProjects\cs372-a4&gt;python server.py Server listening on: localhost on port: 7534 Connected by ('127.0.0.1', 57739) Waiting for message... yo whats up its ya boi client Type /q to quit Type /bs to play Battleship Enter message to send... &gt;o hai client its server you want to play battleship &gt;no k &gt;/q C:\Users\akim7\PycharmProjects\cs372-a4&gt;</pre>	<pre>C:\Users\akim7\PycharmProjects\cs372-a4&gt;python client.py Connected to: localhost on port: 7534 Type /q to quit Type /bs to play Battleship Enter message to send... &gt;yo whats up its ya boi client Waiting for message... o hai client its server &gt;you want to play battleship no &gt;k C:\Users\akim7\PycharmProjects\cs372-a4&gt;</pre>
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```
Client Turn
  A  B  C  D  E  F  G  H  I  J
1 + + + + + + + + + +
2 + + + + + + + + + +
3 + + + + + + + + + +
4 + + + + + + + + + +
5 + + + + + + + + + +
6 + + + + + + + + + +
7 + + + + + + + + + +
8 + + + + + + + + + +
9 + + + + + + + + + +
10 + + + + + + + + + +
    YOUR BOARD

Your opponent hit your Destroyer on i9! Your Destroyer was destroyed!
Server Turn
Your turn! Fire Away!
Attack a space by entering its coordinates, e.g. B4

  A  B  C  D  E  F  G  H  I  J
1 + + + + + + + + + +
2 + + + + + + + + + +
3 + + + + + + + + + +
4 + + + + + + + + + +
5 + + + + + + + + + +
6 + + + + + + + + + +
7 + + + + + + + + + +
8 + + + + + + + + + +
9 + + + + + + + + + +
10 + + + + + + + + + +
    TARGETING BOARD
```

```
Command Prompt - python client.py
Your turn! Fire Away!
Attack a space by entering its coordinates, e.g. B4
>i9
  A  B  C  D  E  F  G  H  I  J
1 + + + + + + + + + +
2 + + + + + + + + + +
3 + + + + + + + + + +
4 + + + + + + + + + +
5 + + + + + + + + + +
6 + + + + + + + + + +
7 + + + + + + + + + +
8 + + + + + + + + + +
9 + + + + + + + + + +
10 + + + + + + + + + +
    YOUR BOARD

Successful hit! You destroyed the opponent's Destroyer!

  A  B  C  D  E  F  G  H  I  J
1 + + + + + + + + + +
2 + + + + + + + + + +
3 + + + + + + + + + +
4 + + + + + + + + + +
5 + + + + + + + + + +
6 + + + + + + + + + +
7 + + + + + + + + + +
8 + + + + + + + + + +
9 + + + + + + + + + +
10 + + + + + + + + + +
    TARGETING BOARD
```

3)

You can play battleship by typing in the appropriate command! I wanted to find a way to only modify the server code to play battleship and have the client code just be generic chat code, but there were some elements that I couldn't get around. For example, when the server sent a message to the client letting them know if an attack was a hit or miss, I didn't want the client to have to OK the message before letting the server have its turn.