

Lab 10: Network Calculator

Due Apr 21 by 11:59pm **Points** 20 **Submitting** a file upload **File Types** zip
Available until Apr 21 at 11:59pm

This assignment was locked Apr 21 at 11:59pm.

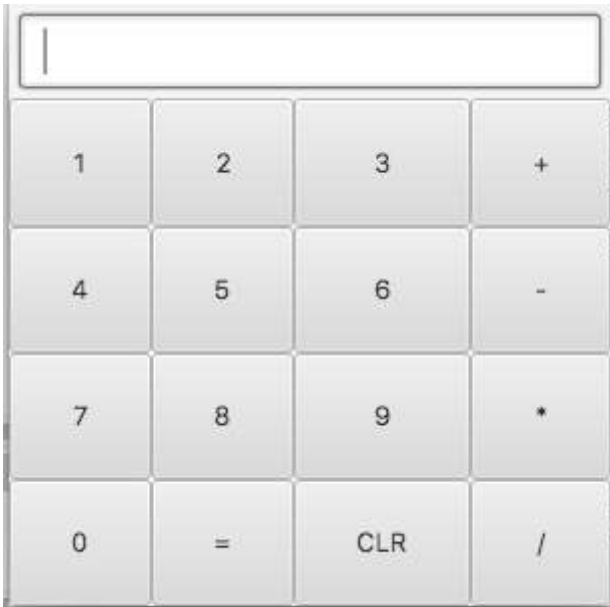
This lab assignment, you will create the networking programs(Client-Server Structure). The server program is named "MathServer.java" will calculate the arithmetic expressions (+, - , *, /) from Client program. After calculation server will send back the result to the Client program. For the Client program, you should modify the Calculator program(in JavaFX) that you used to submit in Lab 3 and rename to "MathCalculatorClient.java". This program should first establish connection to server and send the expression when user clicks 1, +, 2 likes "1+2" to the server and when get the result of the expression ("3") client should display the result on textfield.

The scenarios of this assignment :

First, execute MathServer and listen to Client in the specific port number.

```
[(base) → network java MathServer  
Listening on port 6000  
█
```

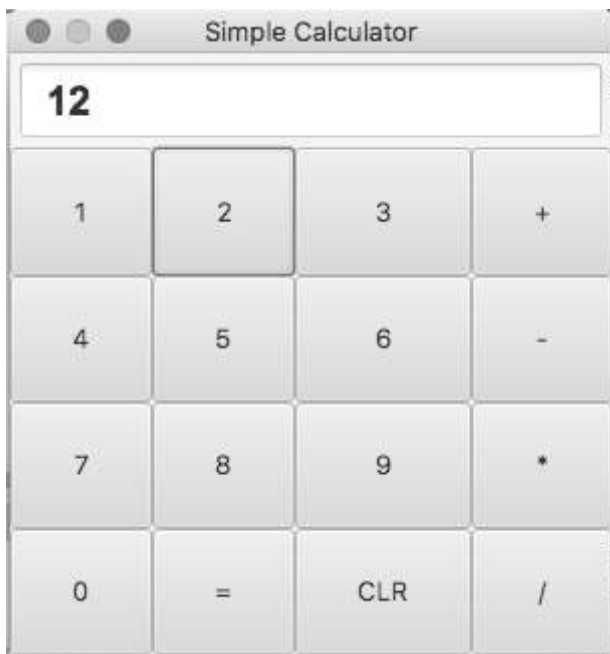
Execute MathCalculatorClient, will establish the connection to server.

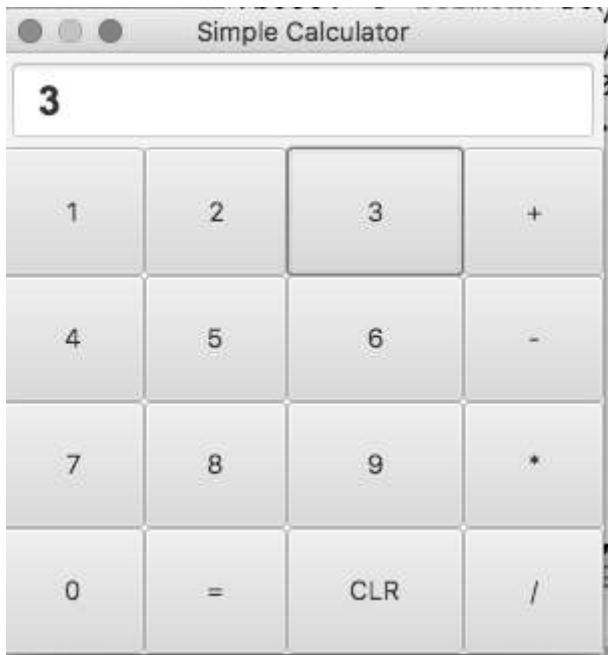
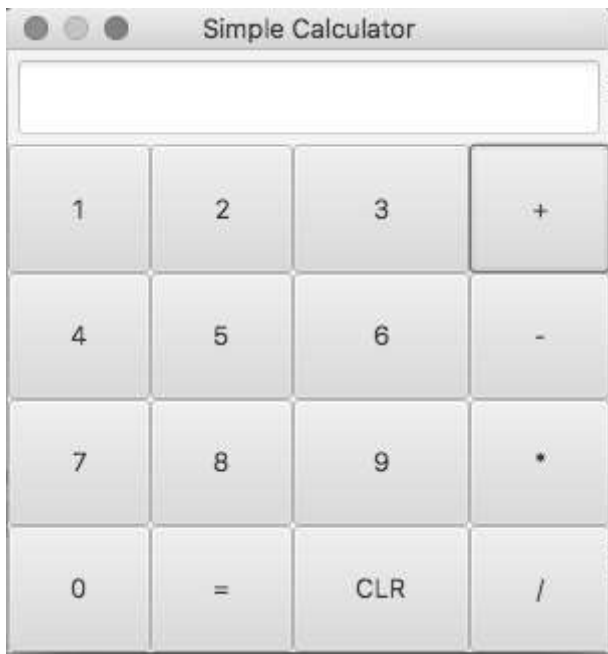


The server will accept the client connection.

```
((base) → network java MathServer  
Listening on port 6000  
Connection from /127.0.0.1  
█
```

User will use the calculator client program to make the arithmetic expression.





So the arithmetic expression is "12+3".

After that, when user click button('=') the client will send the expression to server and get the result back from server.

```
((base) → network java MathServer
Listening on port 6000
Connection from /127.0.0.1
15.0
□
```



Finally when user closes the calculator client program. You should terminate the connection between client and server.

```
(base) → network java MathServer
Listening on port 6000
Connection from /127.0.0.1
15.0
Disconnection
```

Note: Feel free to design and prettify your interfaces. If you use IntelliJ, the folder and packet structure can be changed.

Submission

After completing this lab assignment, zip up your java file. The name of zip file MUST be COP3809C_LAB10_SYY_XXXX.zip where YY is 01, 02 or 03 and XXXX is student id

Lab 10: Network Calculator