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CIS 427

### Project 3

github:

<https://github.com/wicastle/CIS427Project3>

This project contains a Server Client command interaction

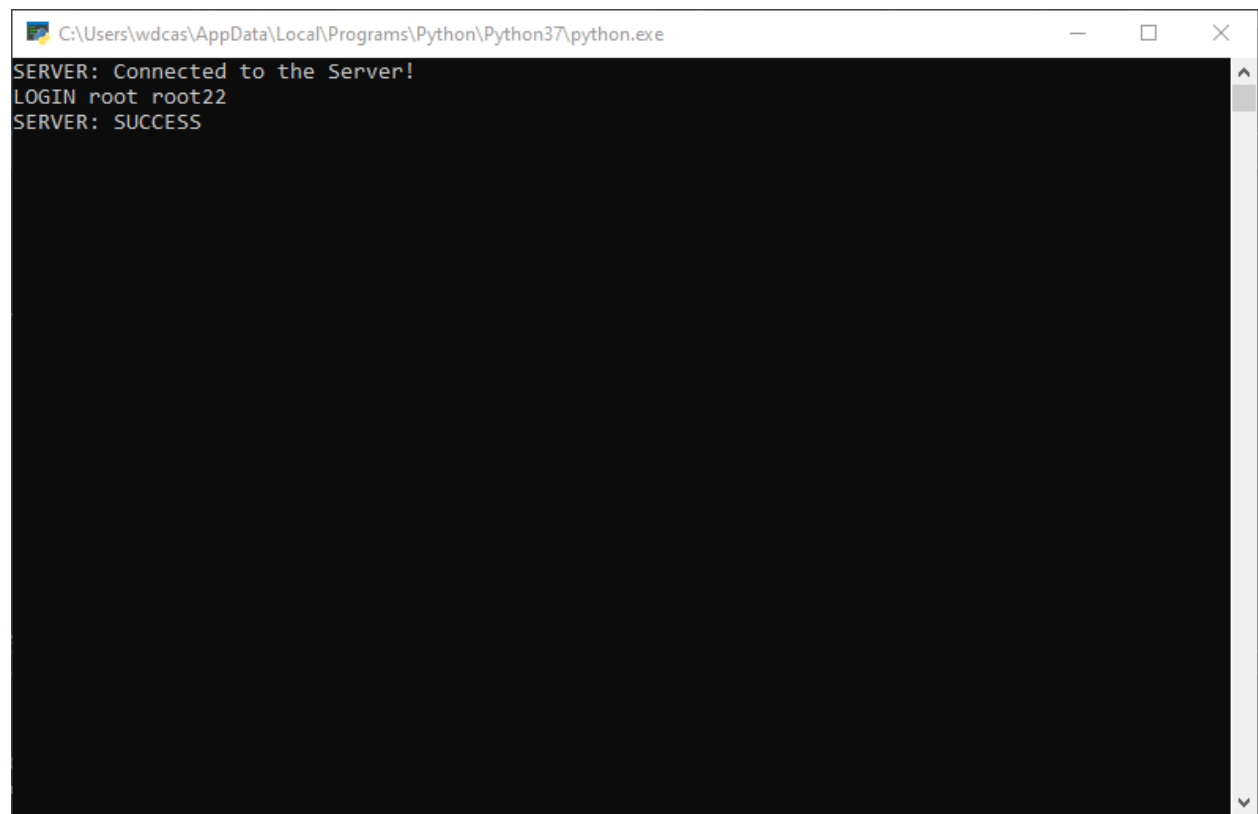
Commands Implemented: LOGIN login from client must match format of 'LOGIN user pws' login creds are checked against local login file creds LOGOUT clears the current logged in person SOLVE checks if logged in and the checks format of the valid inputs -c # calculates circle -r # calculates square -r # # calculates rectangle LIST checks who is logged in and return the current users list information returns SOLVE information -all check if current user is root and the returns everyone's SOLVE information SHUTDOWN Check User if root and then changes the SHUTDOWN flag and finishes the script

Build and Running Must run server before the client and then you can restart client if need be

### **ERRORS**

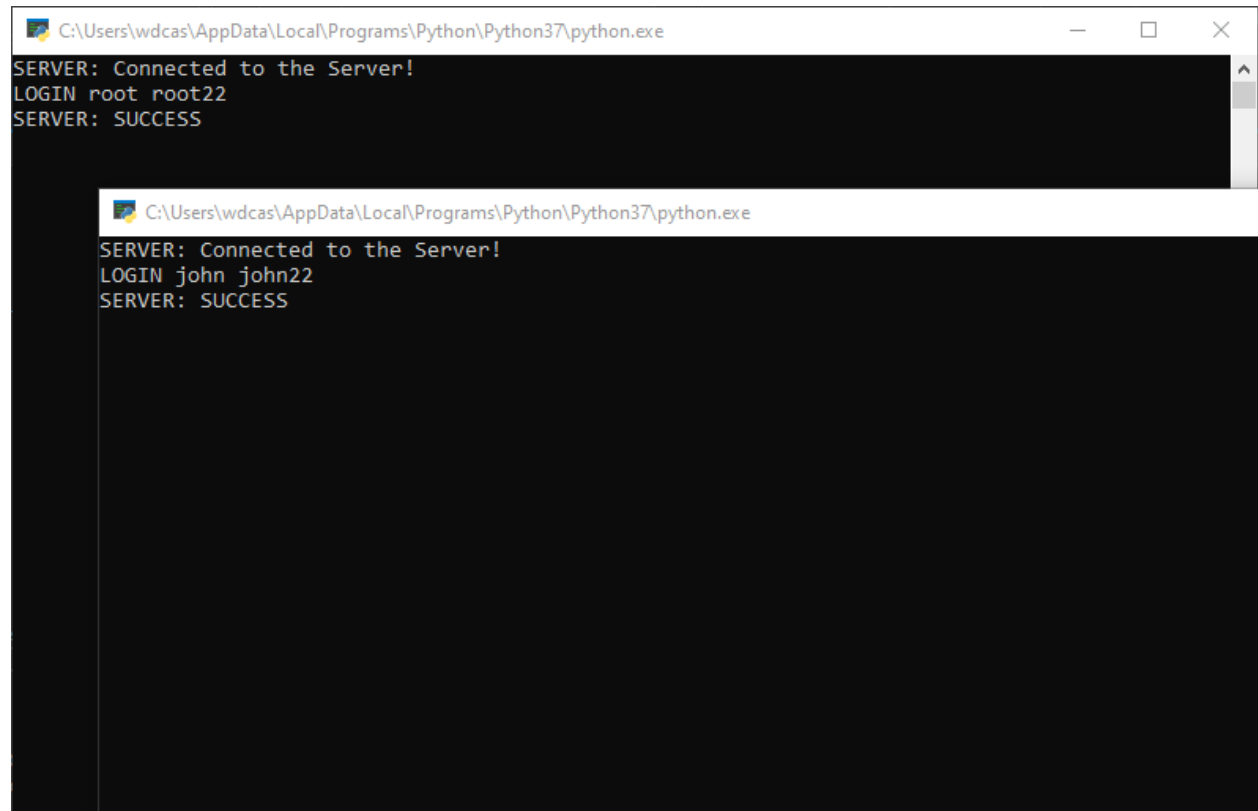
For some reason I could not run this from the console due to a threading issue that I could not resolve. So it has to run from an IDE editor. I used visual studio for this but pycharm was also working. If you want screenshots for working evidence they are in the lower part of this file

```
C:\Users\wdcas\AppData\Local\Programs\Python\Python3...
Loading logins
0
rootroot22
johnjohn22
sallysally22
qiangqiang22
Starting Server . . .
connected with('127.0.0.1', 52782)
!CRITICAL: Closing client!
connected with('127.0.0.1', 52790)
ECHO: LOGIN root root22
sending to client
AUSER:root
ECHO: REAUSER: root
sending to client
REAUSER:root
```



A screenshot of a Python console window. The title bar shows the file path: C:\Users\wdcas\AppData\Local\Programs\Python\Python37\python.exe. The console output consists of three lines: 'SERVER: Connected to the Server!', 'LOGIN root root22', and 'SERVER: SUCCESS'. The console area is black with white text. A vertical scrollbar is visible on the right side of the console area.

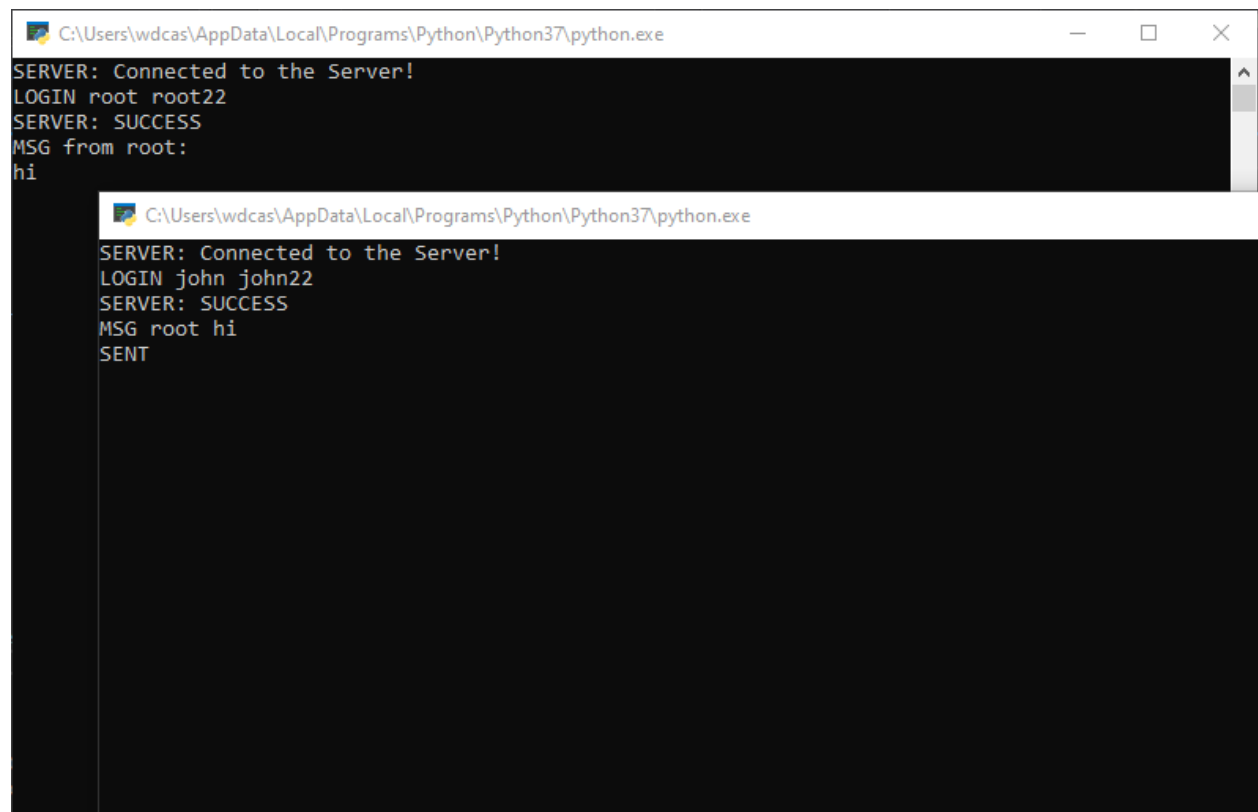
```
C:\Users\wdcas\AppData\Local\Programs\Python\Python37\python.exe
SERVER: Connected to the Server!
LOGIN root root22
SERVER: SUCCESS
```



The image shows two overlapping terminal windows. The top window displays the following text:   
C:\Users\wdcas\AppData\Local\Programs\Python\Python37\python.exe  
SERVER: Connected to the Server!  
LOGIN root root22  
SERVER: SUCCESS  
The bottom window displays the following text:   
C:\Users\wdcas\AppData\Local\Programs\Python\Python37\python.exe  
SERVER: Connected to the Server!  
LOGIN john john22  
SERVER: SUCCESS

```
C:\Users\wdcas\AppData\Local\Programs\Python\Python3...
johnjohn22
sallysally22
qiangqiang22
Starting Server . . .
connected with('127.0.0.1', 52782)
!CRITICAL: Closing client!
connected with('127.0.0.1', 52790)
ECHO: LOGIN root root22
sending to client
AUSER:root
ECHO: REAUSER: root
sending to client
REAUSER:root
connected with('127.0.0.1', 52846)
ECHO: LOGIN john john22
sending to client
AUSER:john
sending to client
AUSER:john
ECHO: REAUSER: root
sending to clientECHO: REAUSER: john
sending to client
REAUSER:john

REAUSER:root
sending to client
REAUSER:john
sending to client
REAUSER:root
```



The image shows two overlapping terminal windows. The top window, titled 'C:\Users\wdcas\AppData\Local\Programs\Python\Python37\python.exe', displays the following text: 'SERVER: Connected to the Server!', 'LOGIN root root22', 'SERVER: SUCCESS', 'MSG from root:', and 'hi'. The bottom window, also titled 'C:\Users\wdcas\AppData\Local\Programs\Python\Python37\python.exe', displays: 'SERVER: Connected to the Server!', 'LOGIN john john22', 'SERVER: SUCCESS', 'MSG root hi', and 'SENT'. Both windows have a black background with white text.

```
C:\Users\wdcas\AppData\Local\Programs\Python\Python37\python.exe
SERVER: Connected to the Server!
LOGIN root root22
SERVER: SUCCESS
MSG from root:
hi

C:\Users\wdcas\AppData\Local\Programs\Python\Python37\python.exe
SERVER: Connected to the Server!
LOGIN john john22
SERVER: SUCCESS
MSG root hi
SENT
```

```
C:\Users\wdcas\AppData\Local\Programs\Python\Python3...
ECHO: LOGIN root root22
sending to client
AUSER:root
ECHO: REAUSER: root
sending to client
REAUSER:root
connected with('127.0.0.1', 52846)
ECHO: LOGIN john john22
sending to client
AUSER:john
sending to client
AUSER:john
ECHO: REAUSER: root
sending to clientECHO: REAUSER: john
sending to client
REAUSER:john

REAUSER:root
sending to client
REAUSER:john
sending to client
REAUSER:root
ECHO: MSG root hi
root
hi
sending to client
MSG:root:hi
sending to client
MSG:root:hi
```

```
C:\Users\wdcas\AppData\Local\Programs\Python\Python3...
MSG:root:hi
ECHO: MSG root everyone
root
everyone
sending to client
MSG:root:everyone
sending to client
MSG:root:everyone
ECHO: MSG john everyone
john
everyone
sending to client
MSG:john:everyone
sending to client
MSG:john:everyone
ECHO: MSG sally everyone
sally
everyone
sending to client
MSG:sally:everyone
sending to client
MSG:sally:everyone
ECHO: MSG qiang everyone
qiang
everyone
sending to client
MSG:qiang:everyone
sending to client
MSG:qiang:everyone
```



```
C:\Users\wdcas\AppData\Local\Programs\Python\Python37\python.exe
SERVER: Connected to the Server!
LOGIN root root22
SERVER: SUCCESS
MSG from root:
hi
MSG -all
MSG from root:
everyone
C:\Users\wdcas\AppData\Local\Programs\Python\Python37\python.exe
SERVER: Connected to the Server!
LOGIN john john22
SERVER: SUCCESS
MSG root hi
SENT
MSG from john:
everyone
```

```
C:\Users\wdcas\AppData\Local\Programs\Python\Python3...
sending to client
MSG:root:everyone
sending to client
MSG:root:everyone
ECHO: MSG john everyone
john
everyone
sending to client
MSG:john:everyone
sending to client
MSG:john:everyone
ECHO: MSG sally everyone
sally
everyone
sending to client
MSG:sally:everyone
sending to client
MSG:sally:everyone
ECHO: MSG qiang everyone
qiang
everyone
sending to client
MSG:qiang:everyone
sending to client
MSG:qiang:everyone
!CRITICAL: Closing client!
sending to client
RUSER:john
!CRITICAL: Closing client!
```