```
C:\Users\wdcas\AppData\Local\Programs\Python\Python37\python.exe
Server: Connected to the Server!
LOGIN sally sally22
Server: SUCCESS
SOLVE -r 1
Server: Square`s perimeter is 4.0 and area is 1.0
SOLVE -c 2
Server: Circle`s circumference  is 12.57 and area is 12.57
SOLVE -r 2 3
Server: Rectangle`s perimeter is 10.0 and area is 6.0
SOLVE -c
Server: 301 Error Format Type
SOLVE
Server: 301 Error Format Type
SOLVE -
Server: 301 Invalid SOLVE command
```

```
C:\Users\wdcas\AppData\Local\Programs\Python\Python37\python.exe
Loading logins
0
rootroot22
johnjohn22
sallysally22
qiangqiang22
Starting Server . . .
connected with ('127.0.0.1', 57595)
ECHO: LOGIN sally sally22
ECHO: SOLVE -r 1
ECHO: SOLVE -c 2
ECHO: SOLVE -r 2 3
ECHO: SOLVE -c
ECHO: SOLVE
ECHO: SOLVE -
```

```
LIST
Server: sally
    SOLVE -r 1
    Square`s perimeter is 4.0 and area is 1.0
    SOLVE -c 2
    Circle`s circumference  is 12.57 and area is 12.57
    SOLVE -r 2 3
    Rectangle`s perimeter is 10.0 and area is 6.0
    SOLVE -c
    SOLVE
    SOLVE -


LIST -all
Server: ERROR: Must be root user
```

```
C:\Users\wdcas\AppData\Local\Programs\Python\Python37\python.ex
Loading logins
0
rootroot22
johnjohn22
sallysally22
qiangqiang22
Starting Server . . .
connected with ('127.0.0.1', 57595)
ECHO: LOGIN sally sally22
ECHO: SOLVE -r 1
ECHO: SOLVE -c 2
ECHO: SOLVE -r 2 3
ECHO: SOLVE -c
ECHO: SOLVE
ECHO: SOLVE -
ECHO: LIST
ECHO: LIST -all
```

```
LOGOUT
Server: 200 OK
SHUTDOWN
Server: Must be root
```

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

```
 logout
 ECHO: SHUTDOWN
 Must be root
 connected with ('127.0.0.1', 57636)
 connected with ('127.0.0.1', 57637)
 ECHO: LOGIN root root22
```

```
LIST
Server: root
    SOLVE -r 1
    Square`s perimeter is 4.0 and area is 1.0
    SOLVE - r 2 3
    SOLVE -r 2 2
    SOLVE -r 1 w
    SOLVE -r 1 2
    SOLVE -r 2 3
    Rectangle`s perimeter is 10.0 and area is 6.0
    SOLVE -r 2
    Square`s perimeter is 8.0 and area is 4.0
```

```
LIST -all
Server: root
    SOLVE -r 1
    Square`s perimeter is 4.0 and area is 1.0
    SOLVE - r 2 3
    SOLVE -r 2 2
    SOLVE -r 1 w
    SOLVE -r 1 2
    SOLVE -r 2 3
    Rectangle`s perimeter is 10.0 and area is 6.0
    SOLVE -r 2
    Square`s perimeter is 8.0 and area is 4.0
john
    SOLVE -c 5
    Circle`s circumference  is 31.42 and area is 78.54
    SOLVE -r 3
    Square`s perimeter is 12.0 and area is 9.0
    SOLVE -r 1 1
    SOLVE -r 2 3
sally
    SOLVE -r 1
    Square`s perimeter is 4.0 and area is 1.0
    SOLVE -c 2
    Circle`s circumference  is 12.57 and area is 12.57
    SOLVE -r 2 3
    Rectangle`s perimeter is 10.0 and area is 6.0
    SOLVE -c
    SOLVE
    SOLVE -
qiang
    No interactions yet
```

```
connected with ('127.0.0.1', 57637)
ECHO: LOGIN root root22
ECHO: LIST
ECHO: LIST -all
```

```
SHUTDOWN
Server: 200 OK
```

```
ECHO: SHUTDOWN
shutdown
Shutting Down Server . . .

Process finished with exit code 0
```

```
C:\Users\wdcas\AppData\Local\Programs\Python\Python37\python.exe
Loading logins
0
rootroot22
johnjohn22
sallysally22
qiangqiang22
Starting Server . . .
connected with ('127.0.0.1', 61374)
```

```
C:\Users\wdcas\AppData\Local\Programs\Python\Python37\python.exe
Server: Connected to the Server!
```

```
C:\Users\wdcas\AppData\Local\Programs\Python\Python37\python.exe
Server: Connected to the Server!
LOGIN dude dude111
Server: FAILURE: pls enter correct credentials
LOGIN john john22
Server: SUCCESS
```

```
C:\Users\wdcas\AppData\Local\Programs\Python\Python37\python.exe
Loading logins
0
rootroot22
johnjohn22
sallysally22
qiangqiang22
Starting Server . . .
connected with ('127.0.0.1', 61374)
ECHO: LOGIN dude dude111
ECHO: LOGIN john john22
```