

*****The project was done by*****
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Function implemented:

1- usrInfo():

- a. This is a Boolean function which check if the username and password entered by the Client is an authorized root access.

2- notFoundCommands():

- a. This function is to check if the commands that entered by the clients are matching for the root access. For examples if normal user entered "MSGSTORE", the system will display an error because these commands are only for root access. It also checks if the user is typing something the is not in the range of the commands for example if the user typed "ENTER" then it will display an error that will say commands are not founds.

3- writeToFile():

- a. This function will write message to the file for example. If the user Entered command "MSGSTORE", then it will ask him for a quote, then the quote will be saved to a file.

4- readFile():

- a. This function will read a message from a file to the client. The function will run and save all the information inside an array List which it will be display to the client

How to run the Program:

Steps:

- **Mac OSX:**

- **Terminal**

- 1- Open Terminal then write "cd location of the file you Downloaded". [ENTER].
- 2- Then now you are inside the file location so now do "cd p1" [ENTER].
- 3- Now You are inside p1 so then you do "cd p1-client-server" [ENTER].
- 4- Now you are inside the folder p1-client-server, So now you go to "cd src"[ENTER].
- 5- Now you are inside the src folder, to run the program all you have to do is "javac TCPClient2.java" [Enter]
- 6- Then you do "java TCPServer2 " [Enter] to run the program
- 7- Now you repeat the steps from steps 5 to step 6 to run the file "TCPClient2"

Or Follow copy past
Open new Terminal

Server side first:

```
Project_HIsham_Hussein_and_Ibrahim_Alzyady
cd p1
cd p1-client-server
cd src
javac TCPServer2.java
java TCPServer2
```

****Open new Terminal****

Client side second:

```
cd CIS-427-
Project_HIsham_Hussein_and_Ibrahim_Alzyady
cd p1
cd p1-client-server
cd src
javac TCPClient2.java
java TCPClient2
```

- **In NetBeans and another compiler:**

- 1- First go to the NetBeans and go to File->Open then choose the location that you saved the file.
- 2- Inside NetBeans, on the left there is an windows that shows the projects that is opened.
- 3- Click on the Project called “p1-client-server”
 - a. Click on the folder called Source Packages.
 - b. Double tab on the “<default packages>”
- 4- Right click on the File name “TCPServer2.java”, and click right File
- 5- Then right click on the File name “TCPClient2.java” and click run.
- 6- You done.

- **Windows:**

- **Repeat the NetBeans section compiler**
- **Or run the .EXE file**

Output result:

```
src — -bash — 95x24
Last login: Fri Oct 19 22:56:41 on ttys000
wesams-MBP:~ hishamhussein$ cd Desktop
wesams-MBP:Desktop hishamhussein$ cd CIS-427-Project_Hisham_Hussein_and_Ibrahim_Alzyady
wesams-MBP:CIS-427-Project_Hisham_Hussein_and_Ibrahim_Alzyady hishamhussein$ cd p1
wesams-MBP:p1 hishamhussein$ cd p1-client-server
wesams-MBP:p1-client-server hishamhussein$ cd src
wesams-MBP:src hishamhussein$ javac TCPServer2.java
wesams-MBP:src hishamhussein$ java TCPServer2
Waiting on client connections...
Received a connection! Yayay!
wesams-MBP:src hishamhussein$

src — -bash — 80x24
C: LOGIN root root01
S: 200 OK
You already loggedin
C: MSGGET
S: 200 OK
Don't cry because it's over, smile because it happened.
C: MSGGET
S: 200 OK
When you reach the end of your rope, tie a knot in it and hang on.
C: MSGGET
S: 200 OK
Let us sacrifice our today so that our children can have a better tomorrow.
C: MSGGET
S: 200 OK
It is easier to act yourself into a new way of feeling rather than feel your way
into a new way of acting
C: LOGIN root root01
S: 200 OK
You already loggedin
C: SHUTDOWN
S: 200 OK
wesams-MBP:src hishamhussein$

src — java TCPServer2 — 95x24
Last login: Fri Oct 19 22:56:41 on ttys000
[wesams-MBP:~ hishamhussein$ cd Desktop
[wesams-MBP:Desktop hishamhussein$ cd CIS-427-Project_Hisham_Hussein_and_Ibrahim_Alzyady
[wesams-MBP:CIS-427-Project_Hisham_Hussein_and_Ibrahim_Alzyady hishamhussein$ cd p1
[wesams-MBP:p1 hishamhussein$ cd p1-client-server
[wesams-MBP:p1-client-server hishamhussein$ cd src
[wesams-MBP:src hishamhussein$ javac TCPServer2.java
[wesams-MBP:src hishamhussein$ java TCPServer2
Waiting on client connections...
]
```