

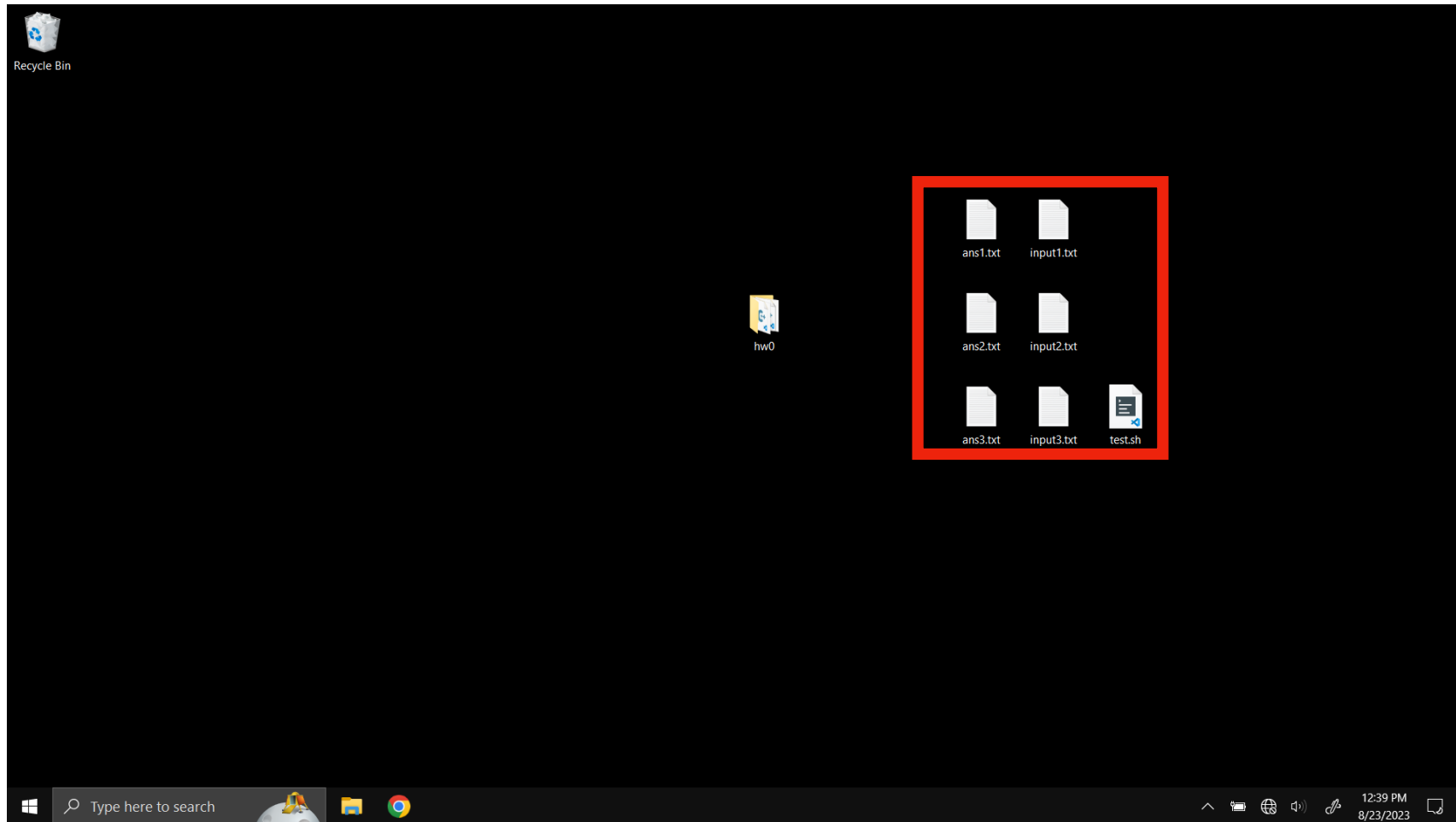
# Testing on the server

for ALL users

**This step comes after you  
successfully uploaded your  
main.cpp and ArgumentManager.h  
files to the server**

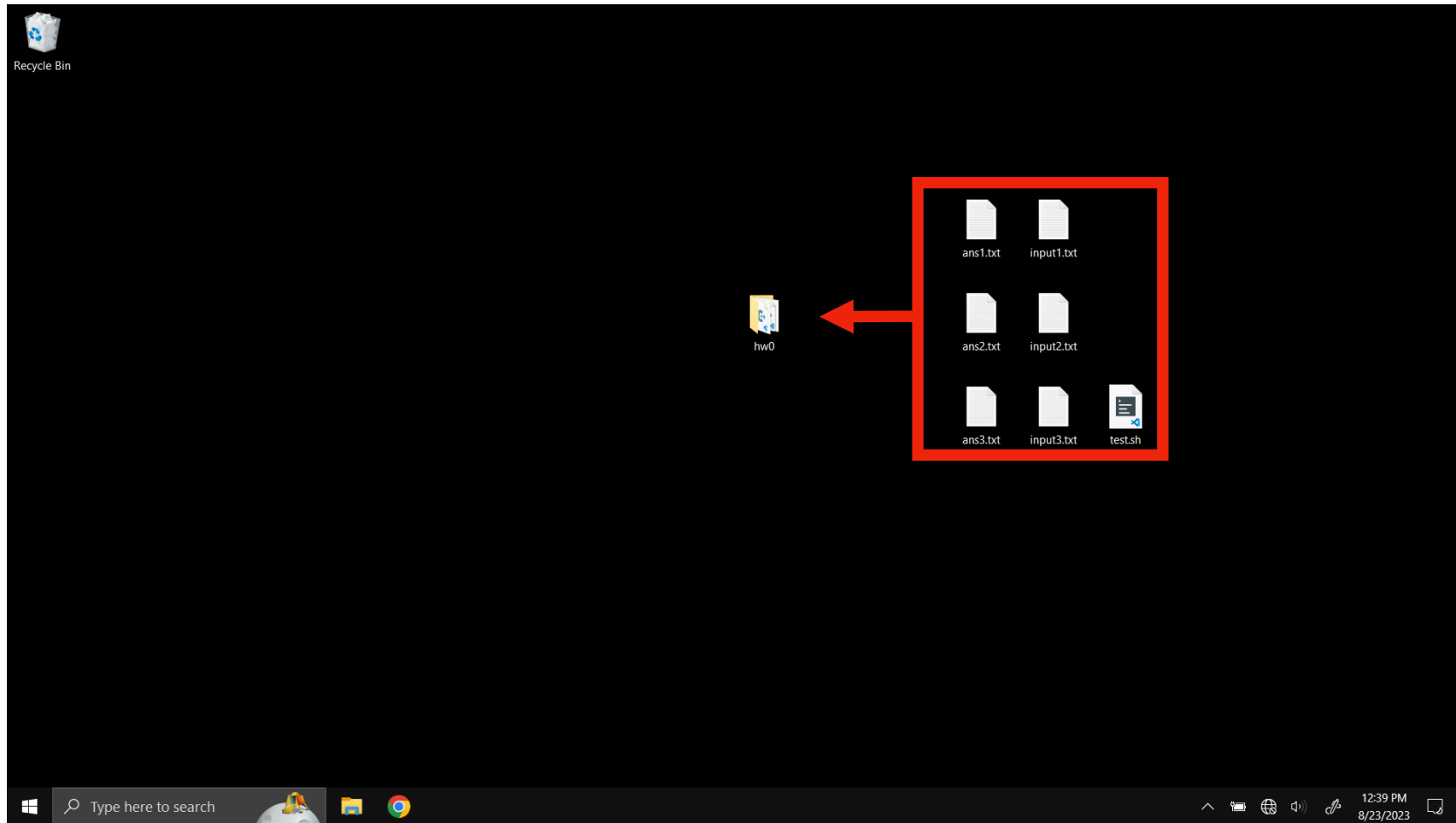
# Step 1

**Get your ans files, input files and test.sh file ready to copy to the server**



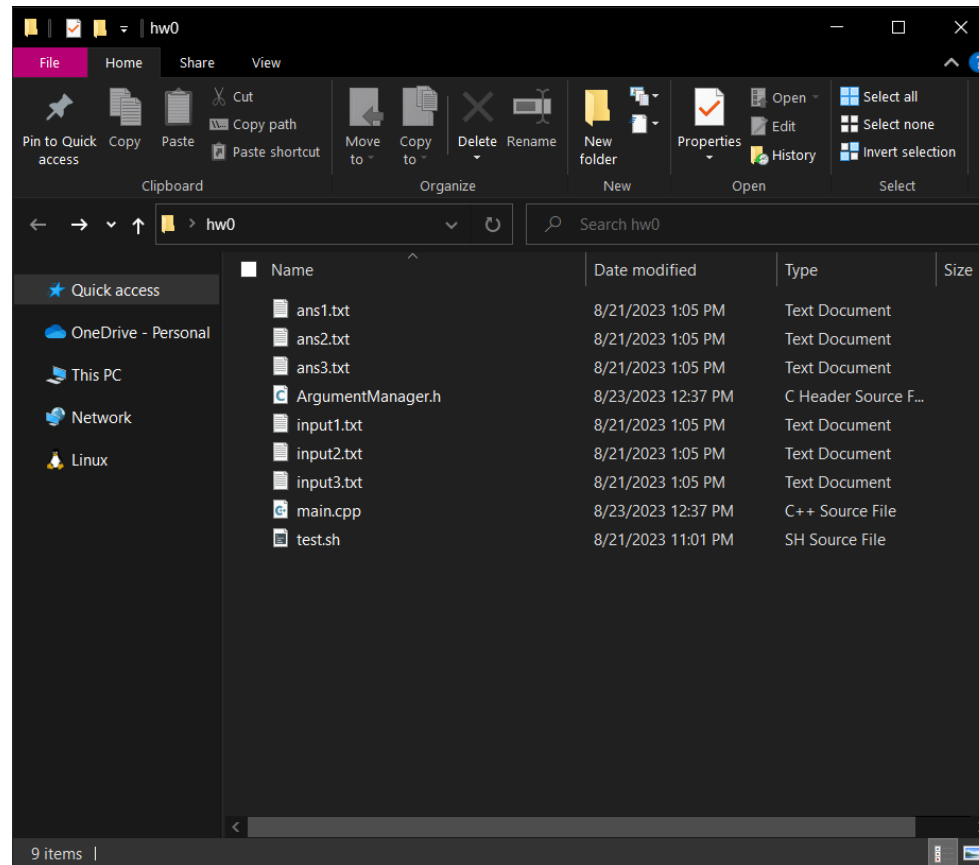
# Step 2

**Drag and drop your ans files, input files and test.sh file into the hw0 folder**



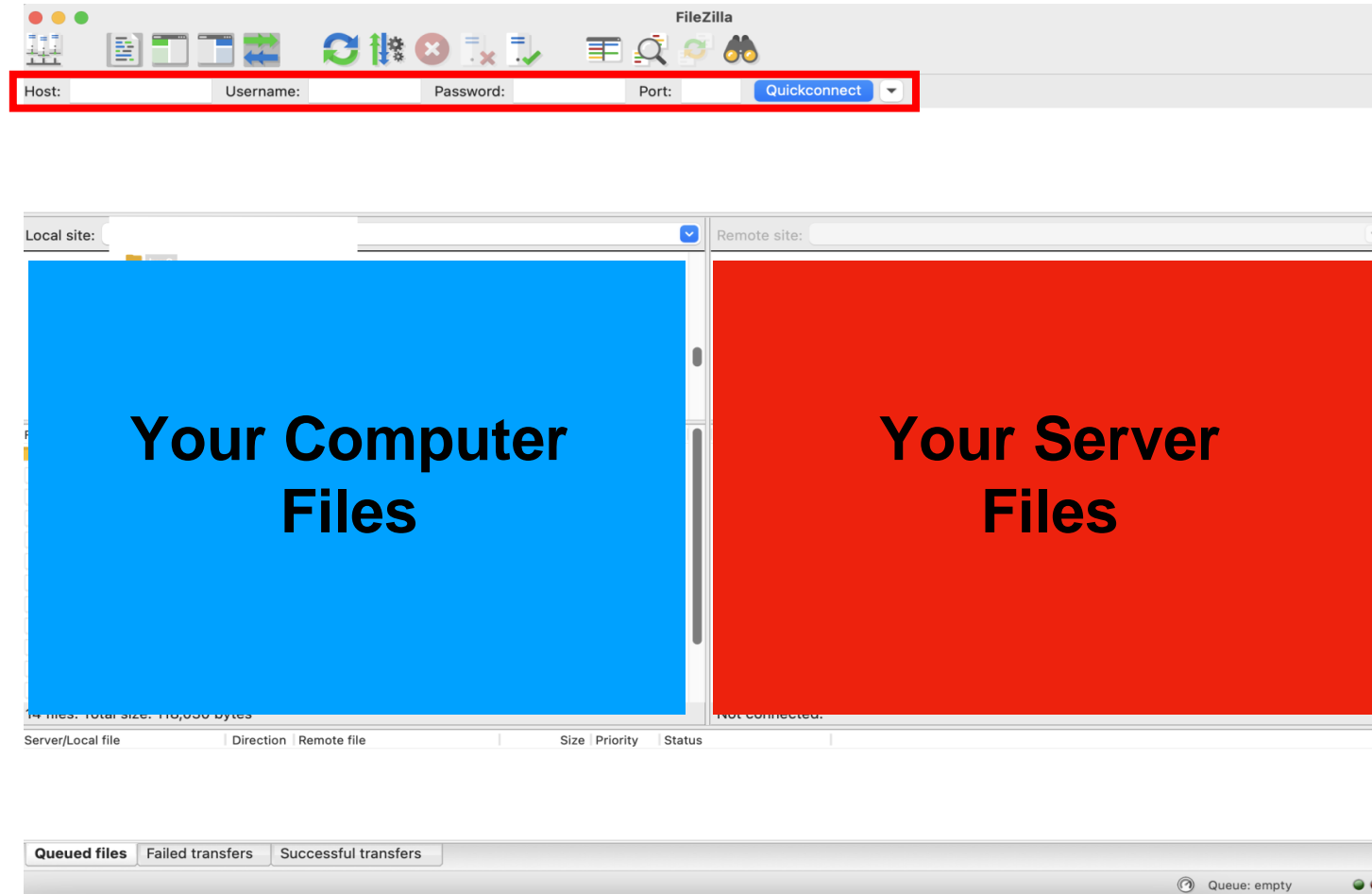
**Our files are now in the hw0 folder and are ready to be put on the server via FileZilla.**

**You should have FileZilla installed after completing the “Uploading to the server” guide. If not, refer to it before continuing.**



# Step 3

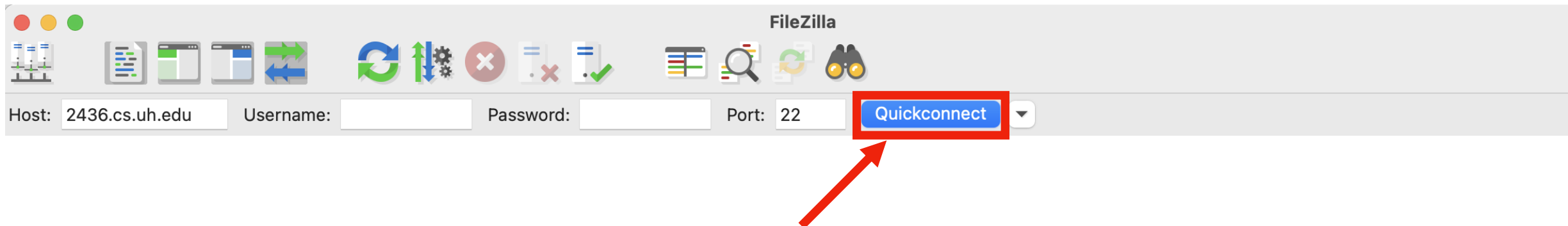
## Open FileZilla and connect to the server



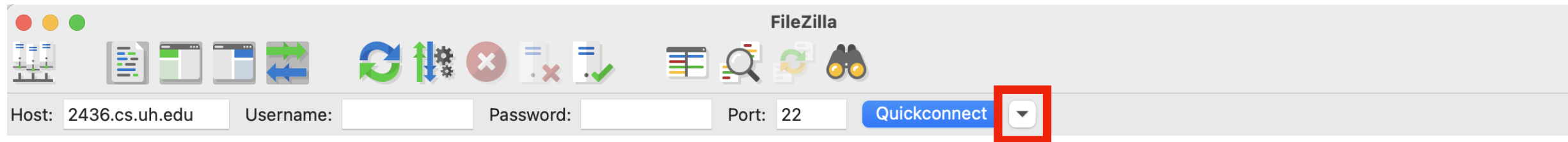
**To connect to the server, enter the following in the fields:**

- **Host:** 2436.cs.uh.edu
- **Username:** your server username
- **Password:** your server password
- **Port:** 22

**Then click “Quickconnect”**



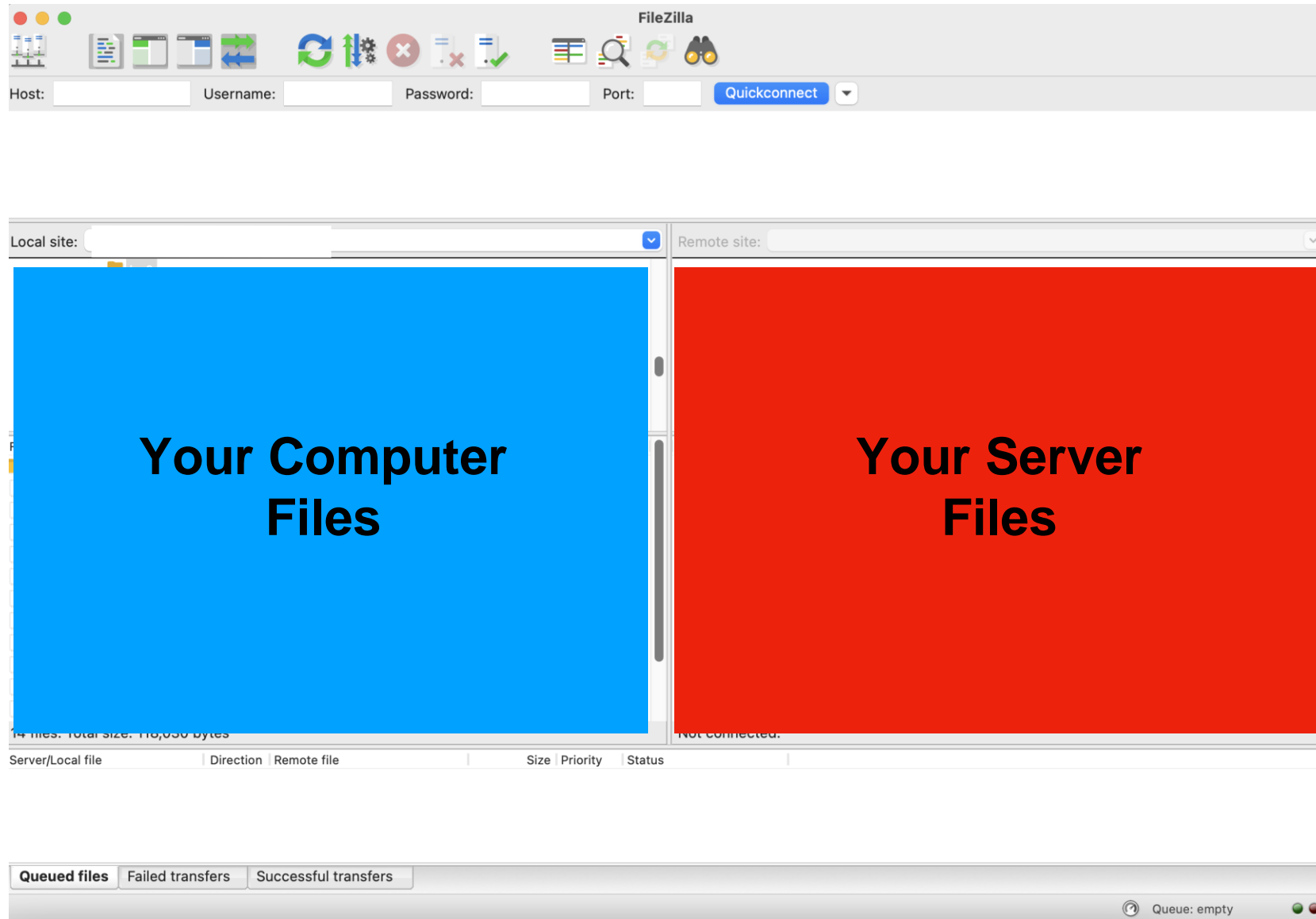
You should also be able to reconnect to the previous login session using the drop down menu next to the “Quickconnect” button





## Remember:

- The left side of the screen is the files on your computer
- The right side of the screen will show the files on the server (once you get connected to the server)

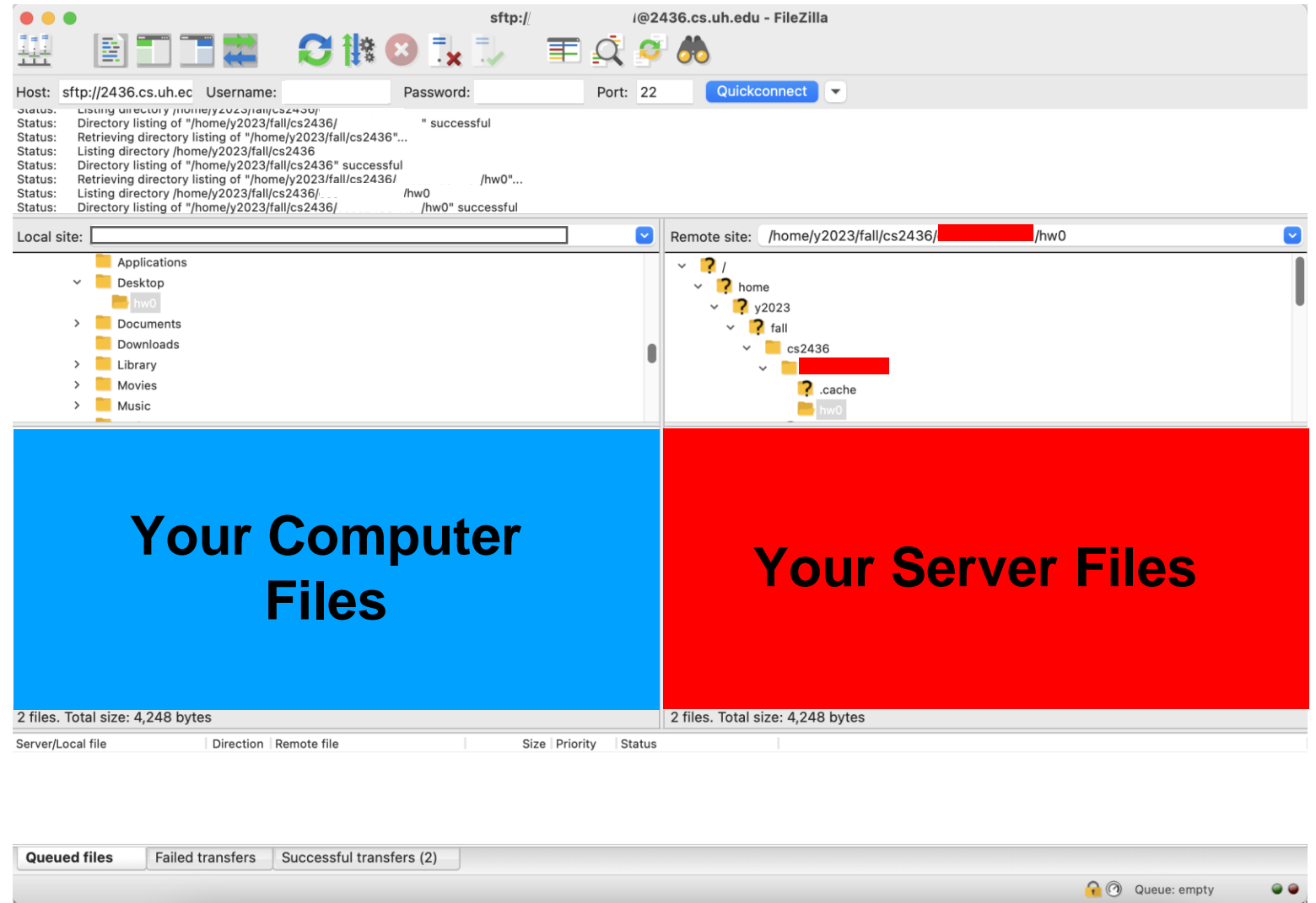


# Step 4

Once connected,

Go to your hw0 folder  
on your computer side

Go to your hw0 folder  
on the server side



# Step 5

There's a difference in number of files.

Copy over the missing files by dragging and drop from the left side to the right side.

Note: If you accidentally copy over files of the same name, it will have a pop-up for you to choose “overwrite” or “skip” those files

FileZilla interface showing a local site (C:\Users\Sandy\Desktop\hw0\)) and a remote site (/home/y2023/fall/cs2436/cosc2436TA02/hw0).

**Local site:** C:\Users\Sandy\Desktop\hw0\

Filename	Filesize	Filetype	Last modified
..			
ans1.txt	117	Text Document	8/24/2023 11:5...
ans2.txt	117	Text Document	8/24/2023 11:5...
ans3.txt	117	Text Document	8/24/2023 11:5...
ArgumentManager.h	2,971	C Header Sour...	8/24/2023 11:5...
input1.txt	51	Text Document	8/24/2023 11:5...
input2.txt	210	Text Document	8/24/2023 11:5...
input3.txt	23	Text Document	8/24/2023 11:5...
test.sh	1,447	SH Source File	8/24/2023 11:5...

8 files. Total size: 5,053 bytes

**Remote site:** /home/y2023/fall/cs2436/cosc2436TA02/hw0

Filename	Filesize	Filetype	Last modified	Permissi...	Owner/Gr...
..					
ArgumentManag...	2,971	C Heade...	8/24/2023 ...	-rwxr-xr-x	cosc2436...
main.cpp	2,090	C++ Sou...	8/24/2023 ...	-rwxr-xr-x	cosc2436...

2 files. Total size: 5,061 bytes

Server/Local file | Direc... | Remote file | Size | Priority | Status

Queued files | Failed transfers | Successful transfers

Queue: empty

# Step 6

We can now see that our computer side and server side is the same.

Next, we will use our terminal to TEST our solution.

The screenshot shows the FileZilla interface with the following details:

- Title Bar:** sftp://cosc2436TA02@2436.cs.uh.edu - FileZilla
- Menu Bar:** File, Edit, View, Transfer, Server, Bookmarks, Help
- Toolbar:** Standard file operations icons.
- Host/Connection:** Host: [empty], Username: [empty], Password: [empty], Port: [empty], Quickconnect button.
- Status Bar:**
  - Status: File transfer skipped
  - Status: Retrieving directory listing of "/home/y2023/fall/cs2436/cosc2436TA02/hw0"...
  - Status: Listing directory /home/y2023/fall/cs2436/cosc2436TA02/hw0
  - Status: Directory listing of "/home/y2023/fall/cs2436/cosc2436TA02/hw0" successful
- Local site:** C:\Users\Sandy\Desktop\hw0\
  - Directory tree showing hw0, Documents, Downloads, Favorites.
  - File List:**

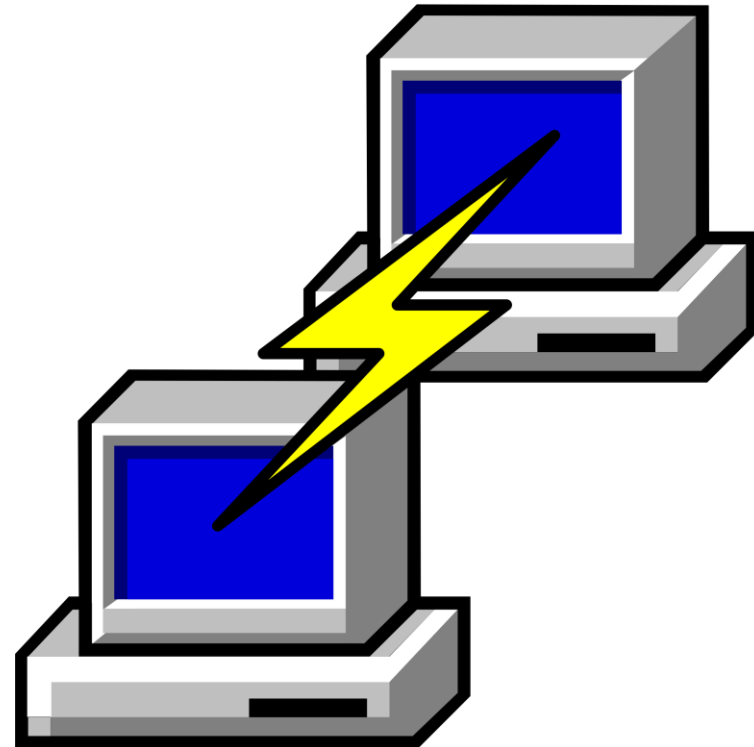
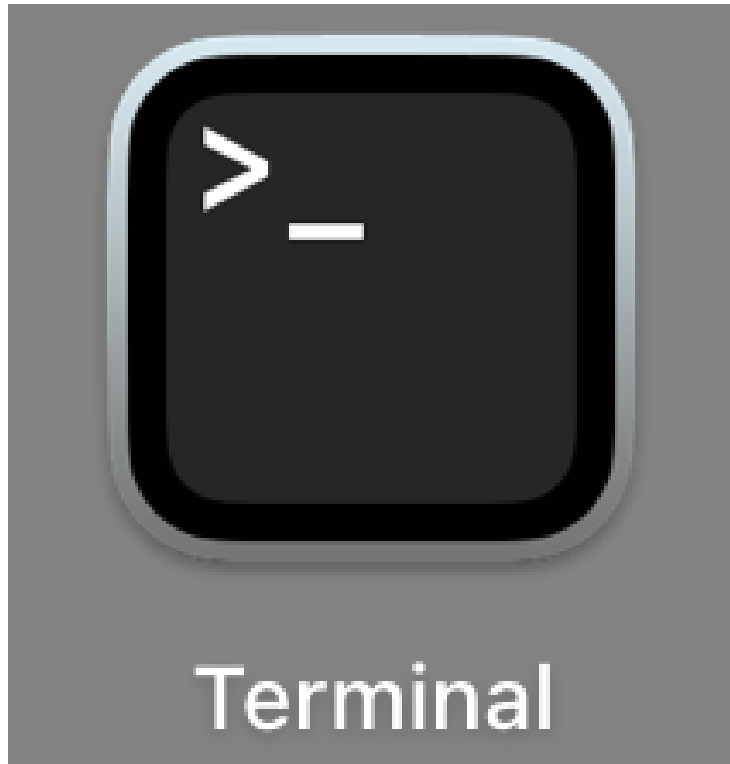
Filename	Filesize	Filetype	Last modified
..			
ans1.txt	117	Text Document	8/24/2023 11:5...
ans2.txt	117	Text Document	8/24/2023 11:5...
ans3.txt	117	Text Document	8/24/2023 11:5...
ArgumentManager.h	2,971	C Header Sour...	8/24/2023 11:5...
input1.txt	51	Text Document	8/24/2023 11:5...
input2.txt	210	Text Document	8/24/2023 11:5...
input3.txt	23	Text Document	8/24/2023 11:5...
test.sh	1,447	SH Source File	8/24/2023 11:5...
  - Summary:** 8 files. Total size: 5,053 bytes
- Remote site:** /home/y2023/fall/cs2436/cosc2436TA02/hw0
  - Directory tree showing home, y2023, fall, cs2436, cosc2436TA02, .cache, hw0.
  - File List:**

Filename	Filesize	Filetype	Last modified	Permissi...	Owner/Gr...
..					
ans1.txt	117	Text Doc...	8/31/2023 ...	-rw-r--r--	cosc2436...
ans2.txt	117	Text Doc...	8/31/2023 ...	-rw-r--r--	cosc2436...
ans3.txt	117	Text Doc...	8/31/2023 ...	-rw-r--r--	cosc2436...
ArgumentManag...	2,971	C Heade...	8/24/2023 ...	-rwxr-xr-x	cosc2436...
input1.txt	51	Text Doc...	8/31/2023 ...	-rw-r--r--	cosc2436...
input2.txt	210	Text Doc...	8/31/2023 ...	-rw-r--r--	cosc2436...
input3.txt	23	Text Doc...	8/31/2023 ...	-rw-r--r--	cosc2436...
main.cpp	2,090	C++ Sou...	8/24/2023 ...	-rwxr-xr-x	cosc2436...
test.sh	1,447	SH Sour...	8/31/2023 ...	-rw-r--r--	cosc2436...
  - Summary:** Selected 7 files. Total size: 2,082 bytes
- Transfer Queue:**

Server/Local file	Direc...	Remote file	Size	Priority	Status
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- Bottom Bar:** Queued files, Failed transfers, Successful transfers (16), Queue: empty

# Step 7: Open Terminal Application

- For Windows, use Putty
- For Mac, use Terminal



# Step 8: Mac Users

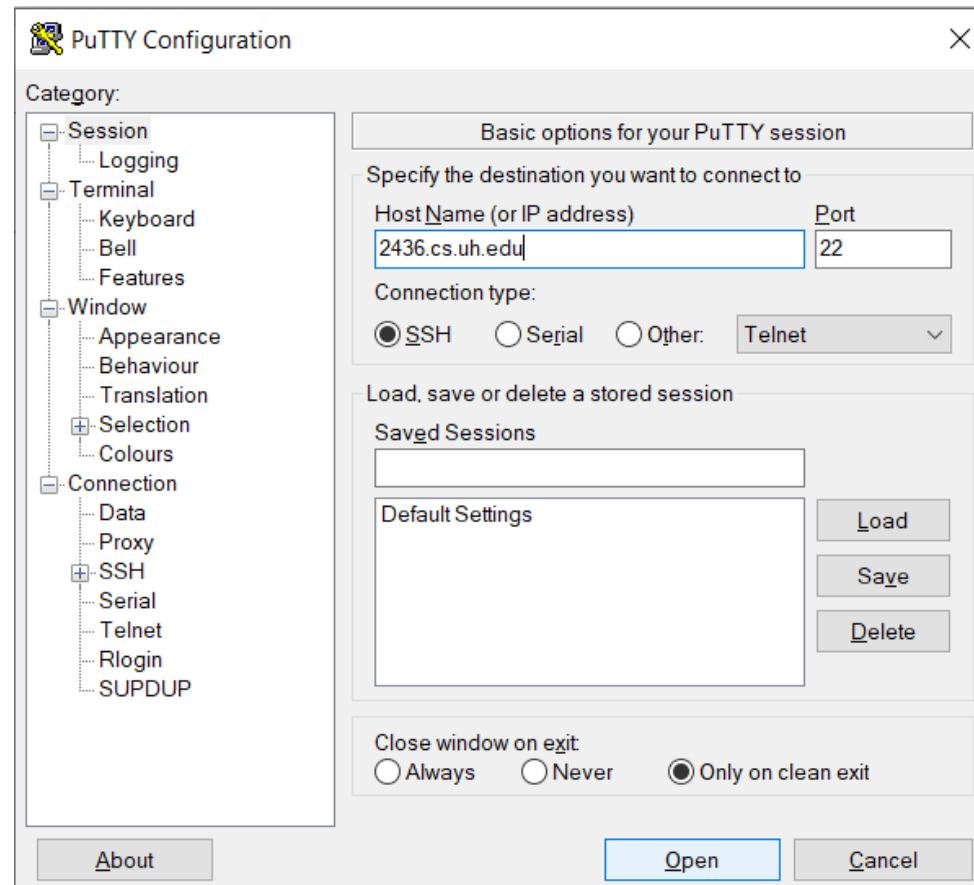
- Open Terminal
- `ssh username@2436.cs.uh.edu` then hit enter
- type in your password (it will not show as you type)



**\*\*Note:** Throughout the rest of this, the red bar will represent where the server username.

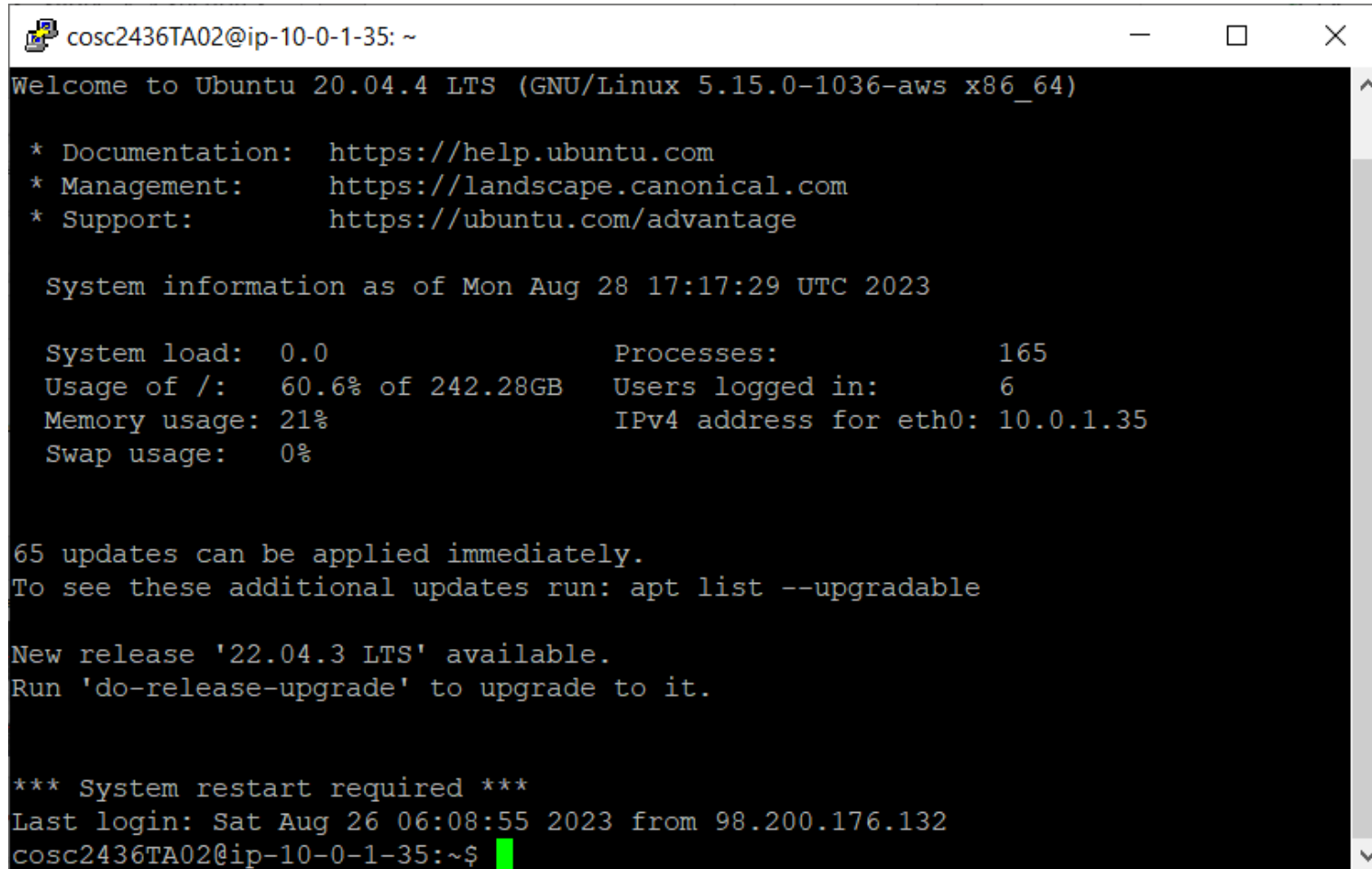
# Step 8: Window Users

- Open Putty and type 2436.cs.uh.edu for the hostname
- Enter your username
- Type in your password (it will not show as you type)



# Step 9

Once you've logged in, your screen should look something like this.



```
cosc2436TA02@ip-10-0-1-35: ~
Welcome to Ubuntu 20.04.4 LTS (GNU/Linux 5.15.0-1036-aws x86_64)

* Documentation:  https://help.ubuntu.com
* Management:    https://landscape.canonical.com
* Support:       https://ubuntu.com/advantage

System information as of Mon Aug 28 17:17:29 UTC 2023

System load:  0.0               Processes:            165
Usage of /:   60.6% of 242.28GB  Users logged in:     6
Memory usage: 21%              IPv4 address for eth0: 10.0.1.35
Swap usage:   0%

65 updates can be applied immediately.
To see these additional updates run: apt list --upgradable

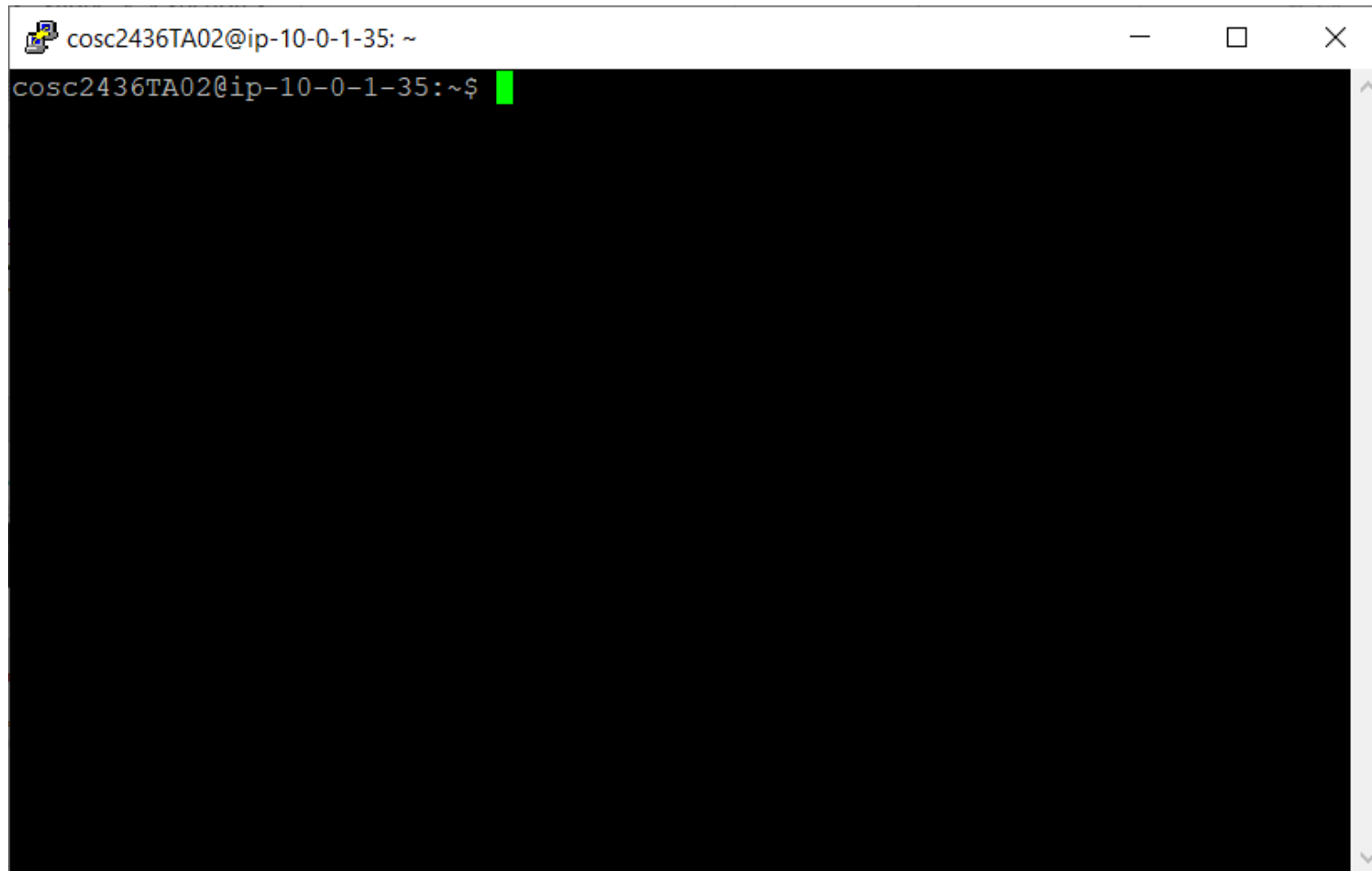
New release '22.04.3 LTS' available.
Run 'do-release-upgrade' to upgrade to it.

*** System restart required ***
Last login: Sat Aug 26 06:08:55 2023 from 98.200.176.132
cosc2436TA02@ip-10-0-1-35:~$
```



# Step 10

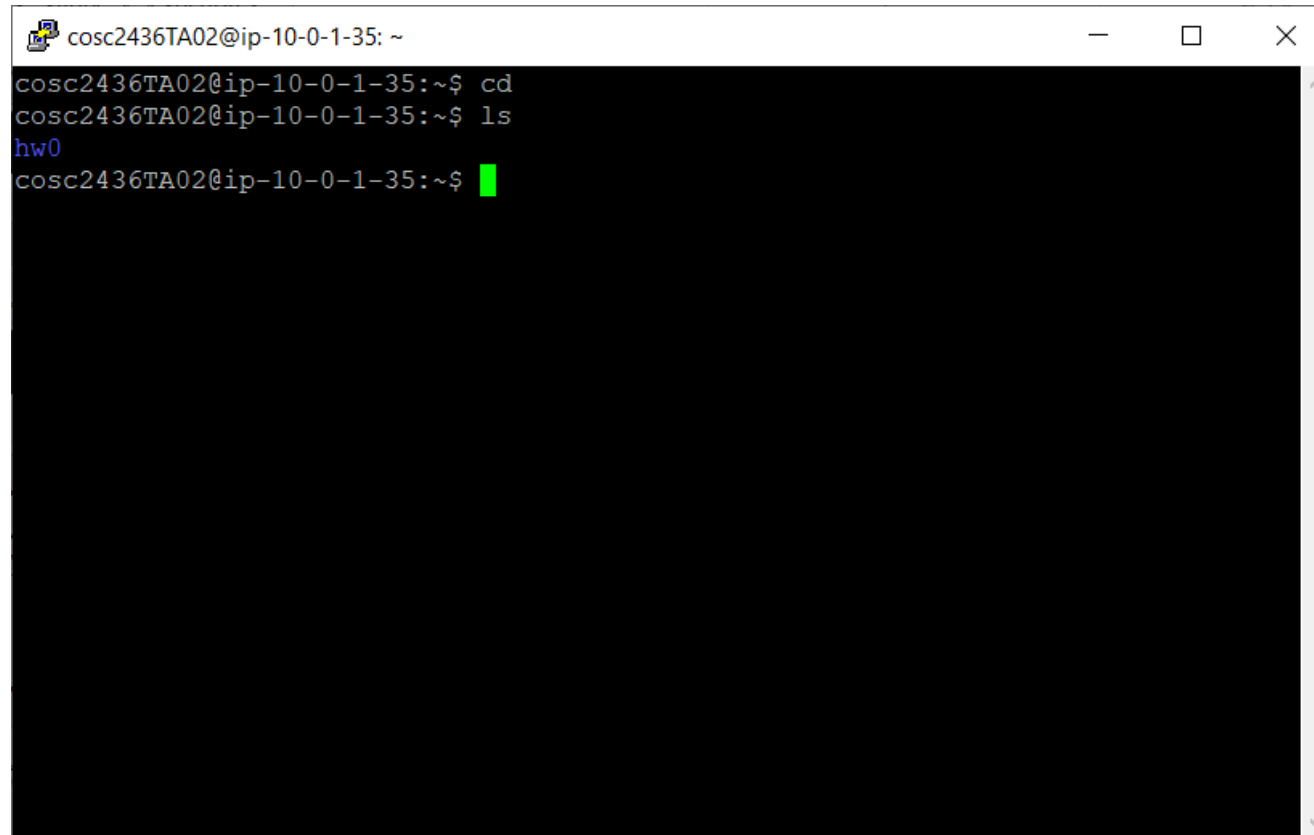
Enter the command “clear” to clear the screen.

A terminal window with a white title bar containing the text 'cosc2436TA02@ip-10-0-1-35: ~' and standard window controls. The terminal area has a black background. The prompt 'cosc2436TA02@ip-10-0-1-35:~\$' is visible in white text, followed by a red cursor. The rest of the terminal is empty.

```
cosc2436TA02@ip-10-0-1-35: ~  
cosc2436TA02@ip-10-0-1-35:~$
```

# Step 11

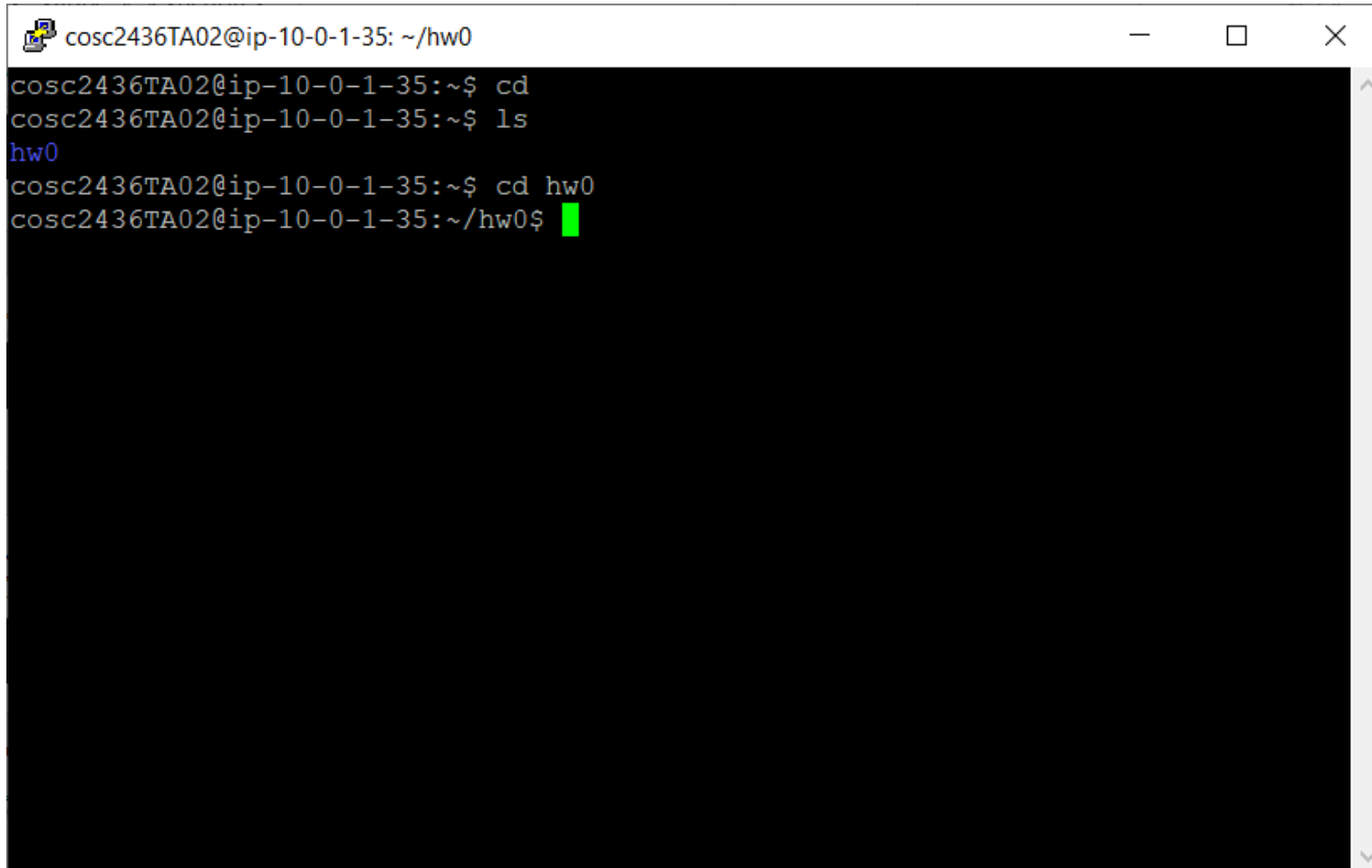
1. Enter “cd” to navigate to the root directory
  2. Enter “ls” to see a list of folders/files in the root directory.
- \*\*Note: The root directory is the home folder. The path should end with your username.**

A terminal window with a title bar showing 'cosc2436TA02@ip-10-0-1-35: ~'. The terminal has a black background with white text. The command history shows 'cd' followed by 'ls', which outputs 'hw0' in blue. A green cursor is at the end of the last prompt.

```
cosc2436TA02@ip-10-0-1-35: ~  
cosc2436TA02@ip-10-0-1-35:~$ cd  
cosc2436TA02@ip-10-0-1-35:~$ ls  
hw0  
cosc2436TA02@ip-10-0-1-35:~$
```

# Step 12

Then enter the command “cd hw0” to go into the hw0 folder

A terminal window with a black background and white text. The window title bar shows 'csc2436TA02@ip-10-0-1-35: ~/hw0'. The terminal content shows a sequence of commands: 'cd', 'ls', and 'cd hw0'. The output of 'ls' is 'hw0'. The prompt changes from '~\$' to '~/hw0\$' after the final command. A green cursor is visible at the end of the last line.

```
csc2436TA02@ip-10-0-1-35: ~/hw0
csc2436TA02@ip-10-0-1-35:~$ cd
csc2436TA02@ip-10-0-1-35:~$ ls
hw0
csc2436TA02@ip-10-0-1-35:~$ cd hw0
csc2436TA02@ip-10-0-1-35:~/hw0$
```

# Step 13: TEST your files

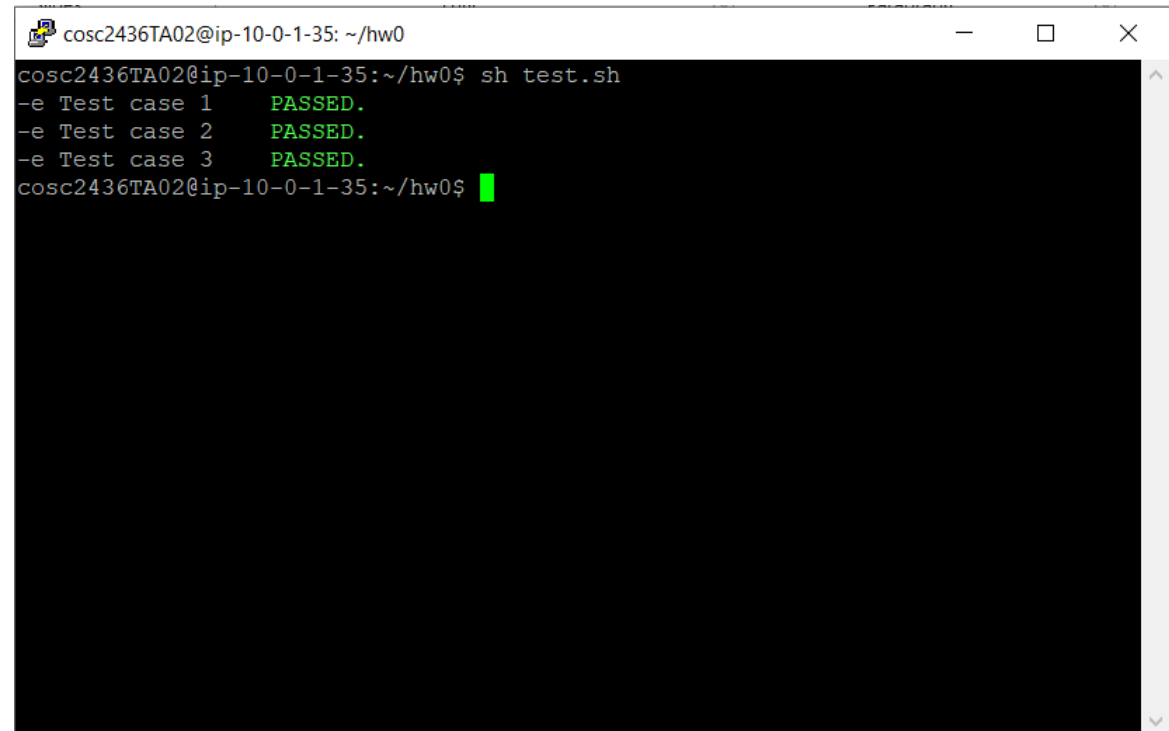
Enter the command “sh test.sh” or the equivalent “./test.sh” to run the test script.

You should either see:

1. 3 green **PASSED**
2. Some test cases as **FAILED**
3. Error messages

If it wasn't the first option, **STOP** and fix your solution .cpp files and reupload to the server.

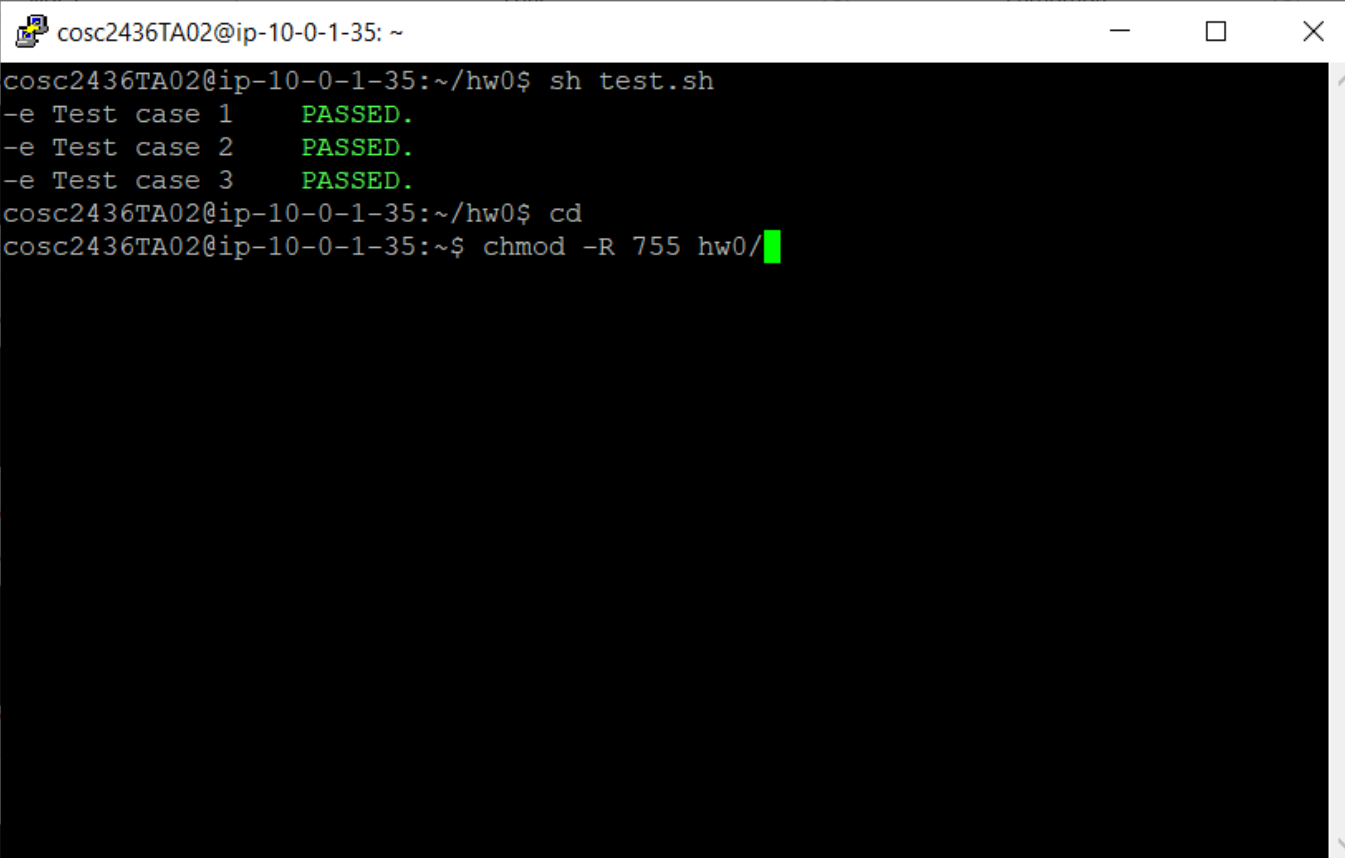
Else, continue to the step

A terminal window with a black background and white text. The window title bar shows 'cosc2436TA02@ip-10-0-1-35: ~/hw0'. The terminal content shows the command 'sh test.sh' being executed, followed by three lines of output: '-e Test case 1 PASSED.', '-e Test case 2 PASSED.', and '-e Test case 3 PASSED.'. The prompt 'cosc2436TA02@ip-10-0-1-35:~/hw0\$' is visible at the bottom, followed by a green cursor.

```
cosc2436TA02@ip-10-0-1-35: ~/hw0$ sh test.sh
-e Test case 1 PASSED.
-e Test case 2 PASSED.
-e Test case 3 PASSED.
cosc2436TA02@ip-10-0-1-35:~/hw0$
```

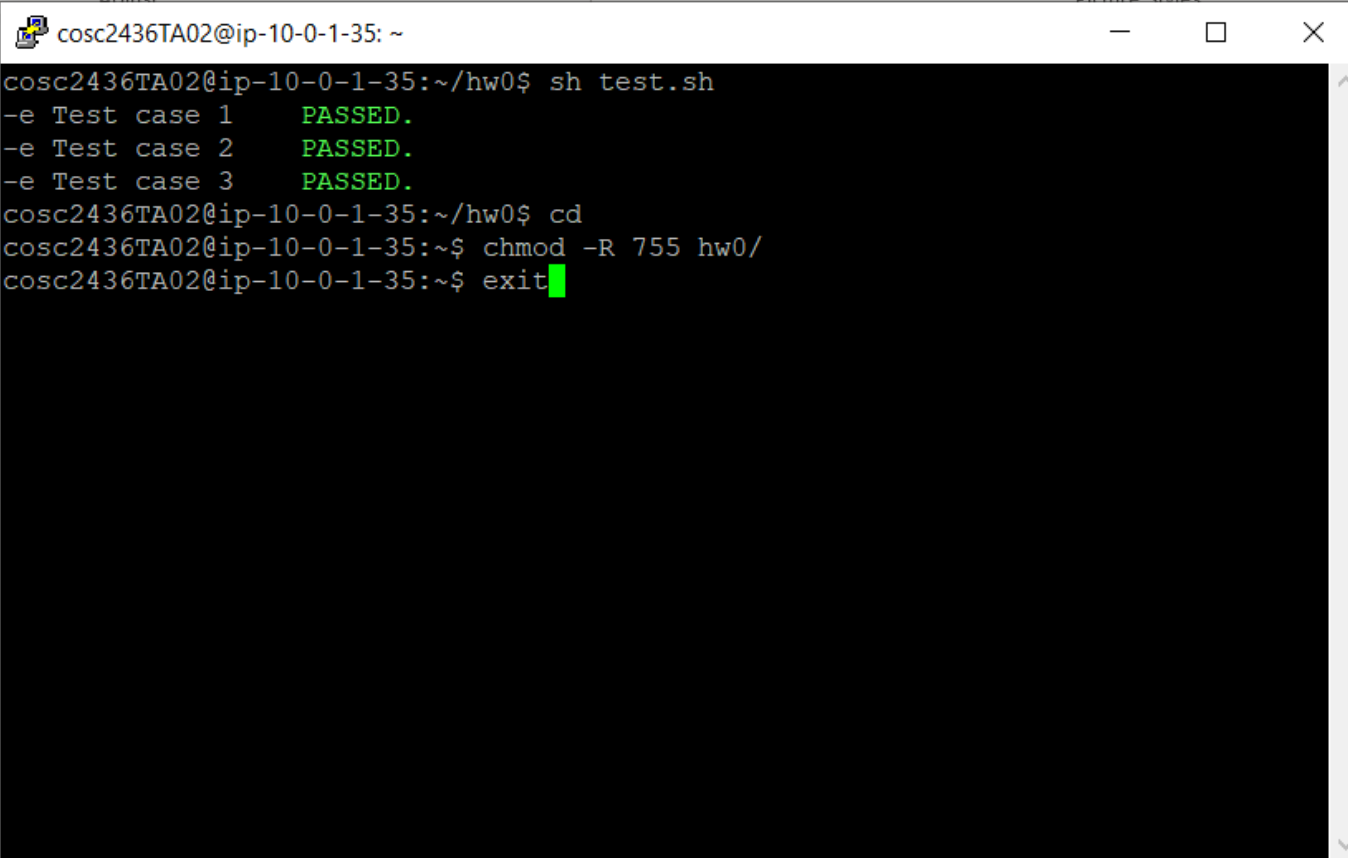
# Step 14: Change the permissions

Enter the command “cd” and then “chmod -R 755 hw0/” to ensure everything has the correct permissions for grading.

A terminal window with a title bar showing the user 'cosc2436TA02' and the IP address 'ip-10-0-1-35'. The terminal output shows three test cases passing, followed by the user navigating to the 'hw0' directory and running the 'chmod -R 755 hw0/' command. The prompt changes from '~' to '~/hw0' after the 'cd' command.

```
cosc2436TA02@ip-10-0-1-35: ~  
cosc2436TA02@ip-10-0-1-35:~/hw0$ sh test.sh  
-e Test case 1      PASSED.  
-e Test case 2      PASSED.  
-e Test case 3      PASSED.  
cosc2436TA02@ip-10-0-1-35:~/hw0$ cd  
cosc2436TA02@ip-10-0-1-35:~$ chmod -R 755 hw0/
```

**Now you're finished! Log out and enjoy your day 😊**  
**You can exit your terminal now.**

A terminal window with a title bar showing 'cosc2436TA02@ip-10-0-1-35: ~'. The terminal content shows a user running 'sh test.sh' which outputs three 'PASSED.' messages for test cases 1, 2, and 3. The user then runs 'cd', 'chmod -R 755 hw0/', and finally 'exit' which is followed by a green cursor.

```
cosc2436TA02@ip-10-0-1-35: ~  
cosc2436TA02@ip-10-0-1-35:~/hw0$ sh test.sh  
-e Test case 1      PASSED.  
-e Test case 2      PASSED.  
-e Test case 3      PASSED.  
cosc2436TA02@ip-10-0-1-35:~/hw0$ cd  
cosc2436TA02@ip-10-0-1-35:~$ chmod -R 755 hw0/  
cosc2436TA02@ip-10-0-1-35:~$ exit
```