

## The Shortlist

If you haven't entered ALL of the following commands in your terminal, you probably haven't submitted your homework.

```
scp hw<hw#>.rkt <netid>@node.zoo.cs.yale.edu:~/cs201/  
ssh <netid>@node.zoo.cs.yale.edu  
cd cs201  
/c/cs201/bin/submit <hw#> hw<hw#>.rkt
```

Note that items in brackets are meant to be replaced as appropriate.

## The Exhaustive Guide:

Congratulations, you have finished your first homework assignment! It's time to submit. As you will soon find out, submitting homework 0 is almost as many steps as finishing homework 0 itself. The following steps will allow you to submit your homework, and can be used as a reference for future homeworks as well! (Note: there will be many more detailed documents under Resources → Zoo-Resources on Canvas. This is the *bare minimum* for submission!)

### Step 1: Copying files onto the Zoo

You have probably been working on the homework on your own personal computer, using DrRacket. But, you have to submit your work from the Zoo, which is separate from your computer! So, your files somehow need to get from your computer, to the Zoo. Here's how:

1. Figure out what folder your `hw0.rkt` and `response.pdf` files are in. For example, they might be in `Documents`, or in something like `Documents/CS201/homeworks`
2. Open up a Terminal app depending on the kind of computer you have
  - a. On Mac, open the "Terminal" app—if you've never used Terminal before, you can find it by clicking the magnifying glass at the top right corner of the screen, and then typing "terminal". You can use the same Terminal window for all of the steps on this document.
  - b. On PC, first enable WSL (Windows subsystem for Linux) by following the first seven steps in this guide: <https://www.windowscentral.com/install-windows-subsystem-linux-windows-10>. Then, download the Ubuntu app (for free) from the Microsoft Store. Any version will suffice. Once it's done downloading, open it up. You should see a new terminal window on your screen. Note that this window is distinct from the Command Prompt that Windows ships with. If you have any questions about how to download/use the app, please come to office hours and/or the Zoo workshops that will be held in the first few weeks of class.
    - a. Another note about working from a Windows machine: accessing local files (those on your computer) is a bit tricky. If you enter the command `pwd`, you'll see that you're currently sitting in a part of your computer that you've never seen before. Your local home folder is accessible by navigating to `/mnt/<disk_name>/Users/<username>/` via the `cd` command:

```
i. cd /mnt/<disk_name>/Users/<username>/
```

3. Using Unix commands, you'll need to go to the folder where your `hw0.rkt` file is! Let's pretend your `hw0.rkt` is in the folder `homeworks`, inside a folder called `CS201`, inside your `Documents` folder. The Unix command "`cd`" means change directory, and you'll have to call it once for each nested folder:

- a. Move to your documents folder:

```
cd documents
```

- b. Move to your CS201 folder:

```
cd CS201
```

- c. Move to your homeworks folder:

```
cd homeworks
```

4. Here it is, the big command that will actually copy your homework to the Zoo! Replace `netid` with your netid, eg `h115`. The "`<netid>@node.zoo.cs.yale.edu`" part tells `scp` you want to copy your file to the Zoo computer system. The "`~/cs201/`" refers to the folder on the Zoo where you want to copy your homework file:

```
scp hw0.rkt <netid>@node.zoo.cs.yale.edu:~/cs201/
```

- a. The system might ask you if you're sure you want to continue connecting. The answer is `yes`
- b. It will also ask you for a password. This is the password that goes with your netid. NOTE that the characters will not show up as you type! Just type your password normally, and press enter when you're done
- c. For homework 0, there's an extra file you need to copy, `response.pdf`. So, repeat the same command above, but replace "`hw0.rkt`" with "`response.pdf`". Also, if `response.pdf` is in a different folder from `hw0.rkt`, you'll need to repeat step 3 to get into that folder.
- d. Note: **do NOT forget the final slash in this command!** You run the risk of overwriting your `cs201` folder if you do!

## Step 2: Getting onto the Zoo

Great! Your files are now on the Zoo. But, you need to get on the Zoo yourself. Here's the command to do that:

```
ssh <netid>@node.zoo.cs.yale.edu
```

4b and 4c apply here as well!

### Step 3: Submitting homework, from the Zoo

Now, you're on the Zoo! Only a few steps left.

1. Move to your `cs201` folder:

```
cd cs201
```

2. Submit your homework files:

```
/c/cs201/bin/submit 0 hw0.rkt response.pdf
```

- a. Note that for future homework assignments, the 0 will become the homework number. So, the general command is:

```
/c/cs201/bin/submit <hw#> hw<hw#>.rkt
```

You'll know the submission has worked if the terminal window says something like:

```
Copied hw0.rkt  
Copied response.pdf
```

But you can't rely solely on this output. Be sure to proceed to step 4!

### Step 4: Checking that your homework has been properly submitted

A copy of your homework should be sitting in the appropriate submit directory at this point, but it's always a good idea to make sure that what you've submitted is actually where you want it to be with the following command:

```
/c/cs201/bin/check <hw#>
```

The output will be the names of files that have been submitted for a given `<hw#>`.

### Step 5: Retrieve your homework and confirm that it is, in fact, the homework that you want to submit

It happens all the time—you upload a file to the Zoo, thinking it's the most up-to-date version of your homework. Then, you get your grade back, and it's far lower than you expected. Why? The file you submitted turns out to be an old version... or even worse, it's totally blank! Trust me, you'll want to do this step, too.

First, rename the homework that's sitting in your CWD (current working directory, or where you are in the file tree):

```
mv hw<hw#>.rkt hw<hw#>-local.rkt
```

Now, execute the `retrieve` command:

```
/c/cs201/bin/retrieve <hw#> hw<hw#>.rkt
```

What does this command do? It takes the homework that you just submitted (which was copied over to a special folder on the Zoo that neither you nor we, the teaching staff, can directly touch), and copies it back over to your CWD. Now, you can run the following command to print out the contents of the file that you just submitted:

```
cat hw<hw#>.rkt
```

You should scroll through the output to ensure that everything looks good. If it does, you're all set! You can exit the Zoo with the following command. If it doesn't, exit the Zoo and circle back to Step 1—you probably uploaded an incorrect version of the file in the first place.

```
exit
```

Note: we renamed the original file because the `retrieve` command fails if called on a file whose name is equal to a file in your CWD.