

ATMS 305 Spring 2017 Homework 1 v1.1

Due: 30 January 2017, 9:30 AM

Enter the output of these commands, and save the responses/screen shots in a file called HW1_netid.pdf in your home directory.

This homework will be submitted using your github account. We will cover how to do this on Thursday. For now, just fork this repository on the github web page (after you log in), login to keeling, and type the following in your home directory

```
git clone git@github.com:[your github username]/ATMS-305.git
```

Note that there are no brackets on your github username in the above command.

To get any updates once you have done 'clone', first add my repository as an upstream

```
git remote add upstream https://github.com/swnesbitt/ATMS-305.git
```

Now, anytime you want to get updates from me without deleting files you have created, just do the following from your repository directory (usually /data/atms305/a/netID/ATMS-305)

```
git fetch upstream
git checkout master
git merge upstream/master
```

Now you're up to date with me on your keeling repository.

To push any changes up to github.com, do the following from the top level of your repository:

```
git add -A
git commit -m "Update due to errors from snesbitt :D"
git push origin master
```

Now all is well on github. This is how you will submit your assignment also.

1. Connecting and disconnecting

1. Log in to keeling.earth.illinois.edu using ssh with your netID and password. Log out.
2. Log in again, using a random user name

-> What happens?

2. Create a file

Use `pico` to create a file called `signature.txt` in `/data/atms305/a/netID/ATMS-305/Week2answers`.

To do this you can

```
mkdir /data/atms305/a/netID/ATMS-305/Week2answers  
cd /data/atms305/a/netID/ATMS-305/Week2answers
```

Then edit the file.

The file should have the following:

Your name

Your major

Your hometown

Save the file and exit.

3. Directories

These are some exercises to help you get the feel for linux directories.

1. Enter the command `cd blah`

-> What happens?

2. Enter the command `cd ..`

Mind the space between "`cd`" and "`..`"! Use the **`pwd`** command.

-> What happens?

3. List the directory contents with the **`ls`** command.

-> What do you see?

-> What do you think these are?

-> Check using the **pwd** command.

4. Enter the **cd** command.

-> What happens?

5. Repeat step 2 two times.

-> What happens?

6. Display the contents of this directory.

7. Try the command **cd root**

-> What happens?

-> To which directories do you have access?

8. Repeat step 4.

Do you know another possibility to get where you are now?

4. Files

- Change directory to / and then to etc. Type **ls**; if the output is longer than your screen, make the window longer, scroll, or try **Shift+PageUp** and **Shift+PageDown**.

The file **inittab** contains the answer to the first question in this list. Try the **file** command on it.

-> The file type of my **inittab** is

- Use the command **cat inittab** and read the file.

-> What is the default mode of your computer?

- Return to your home directory using the **cd** command.
- Enter the command **file .**

-> Does this help to find the meaning of "."?

- Can you look at "." using the **cat** command?
- Display help for the **cat** program, using the **--help** option. Use the option for numbering of output lines to count how many users are listed in the file **/etc/passwd**.

5. Getting help (when you don't have Google)

- Read `man intro`
- Read `man ls`
- Read `info passwd`
- Enter the `apropos pwd` command.
- Try `man` or `info` on `cd`.

-> How would you find out more about `cd`?

- Read `ls --help` and try it out.