

UCF Physics PHZ 3150: Introduction to Numerical Computing
Fall 2022 - Homework 1
Due Friday August 26 11:59pm

Throughout the class, track the time you spend on classwork in your log, including attending class. If you exceed 6 hours outside of class per week, please note in your log what you got done by that point, what you learned, what you have left, and what is still puzzling or problematic. This will help us gauge the workload in the future, including this semester.

Problems to Hand In: Please follow the file-naming instructions below and in future assignments exactly. This greatly helps with grading! If you forget at some point our naming conventions, please revisit handouts/homework_rules_overview.pdf in Webcourses.

As we have not talked about how to set up your computer and Git yet, you will start this homework and store it temporarily in a random location (e.g., Desktop, Downloads etc). Next week you will move it to the `phz3150` folder.

1. **(5 points)** Go to your Desktop or Downloads folder and make a new folder for homework 1, following the rules in handouts/homework_rules_overview.pdf.
2. **(10 points)**. Choose a text editor (not a word processor like Microsoft Word). For Windows, try Start->Windows Accessories->Notepad. gedit is a good choice under Linux. On Mac, launch Finder->Applications->TextEdit, then immediately, TextEdit->Format->Make Plain Text. Save your log as `0-phz3150-yourname.log` in Desktop or Downloads (not the `hw1_yourname/` folder).

Start typing your log (replacing obvious things like your name, the date, and the directory you selected):

```
Jane Doe
Log for PHZ 3150, Spring 2019
*****IN: Mon Jan 7 22:47:07 EST 2019
Opened TextEdit, started this log, saved as:
/home/jdoe/Desktop/0-phz3150-janedoe.log
```

Rule no 1 of logs: **NEVER** change anything above the current entry (i.e., a row of stars). Seriously, as a working professional, you may need to swear in court that you have never done it in any log file, ever, even the ones you use for playing around. So, type the top part, then the row of stars and the date, and then never type up there again. Ever. Not even to fix errors.

Start each work session with "*****IN: " and the date in the format above (type "date" to a shell prompt and cut-n-paste it; do it manually until you learn how, following the format above EXACTLY, including spaces).

End each work session with "*****OUT: " and the date in the same format. This lets you (later) write a program to calculate the total time worked. That's useful for filing timecards in future jobs, as well as for our course needs now. We will discuss more on what to put in your log in class. For now...

2. **(10 points)** Copy and paste the contents of file `hw1-survey.txt` from Webcourses homework/HW1/ into your log (after the last line). Fill in your answer after each question.

3. **(10 points)** Close your log entry as instructed above (with "*****OUT: " and the date). Copy your log file in your `hw1_<yourname>/` folder. Zip the `hw1_<yourname>/` folder.

