General Instructions for Submitting Problem Sets

Physics 305, Fall 2020

Your solution to each problem should be in a file whose name contains information about which problem set and which problem it satisfies. For example, for problem two in the first problem set, you might use `PrimeFactor\_1\_2.py`

File Format

Each file must have:

- An optional "#!/usr/bin/env python" line as the first line.
- A brief description as a multi-line comment (set in triple-quotes), giving a title to the program, your name, the problem for which it is a solution, and instructions for running the program. If the complexity of the program requires it, give a brief yet informative description of what the program does and how it does it. For example,

```
#!/use/bin/env python
# Time-stamp: <ProblemSetInstructions.tex on Thursday, 19 January, 2020 at 06:55:30 MST (teifler)>
"""
Print the prime factor decomposition of a given number

Solution to Problem Set 1, Problem 2
Tim Eifler

To run:
   ./thisfile <number>

This is just a simple brute force approach, trying all possible numbers, as suggested
   in the hint.
"""

def doit():
et cetera...
```

- Comment your code as much as necessary.

Some comments on comments in code. As discussed in class, you should try to write code which is so clear that it requires no additional explanation (in the form of comments) for someone to see what it does. That said, sometimes comments are appropriate to ensure that someone reading your code understands what is going on, particularly if you feel you are being especially clever.

Submitting Your Work

Once you have completed all of the problems in a problem set, to submit your solutions:

- Create a directory (using `mkdir`) whose name is your NETID with the assignment number appended; for me, this would be `teifler_1`
- Copy any files you wish to submit into that directory. For example,
  `cp Dots_1_1.py PrimeFactor_1_1.py teifler_1`
- Create a compressed tar file[1] with the same name but with a ".tgz" extension from that directory: `cd` into the parent directory[2] of the one you just created, and then execute the equivalent of (*i.e.* with your own filenames!):
  `tar -czvf teifler_1.tgz teifler_1`
- You can check to see if you created the tar file properly by asking for a list of its contents:
  `tar -tzf teifler_1.tgz`
  and ensuring that all is there.

You will now have a compressed tar file named the equivalent of `teifler_1.tgz`. This is the file you should submit on D2L. You can submit your work to D2L as often as you like; if you use the same file name for the `tgz` file, it will overwrite your previous submissions.

[1] This is made with the `tar` command, which stands for "tape archive"; it dates from the time when magnetic tape was used as the principle archival storage medium! `tar` is similar in concept to `zip`, the archiving program you may be familiar with from using Windows computers.

[2] By running this command from the parent directory, the directory you specify will be put into the tar file. When we download this file onto our own computer for grading and "un-tar" it, it will then create this directory and put all of your solutions into it. This way, we can keep your solutions separate from those of the other students in the class.