Computational Physics - Linux and Command Line Skill Assessment

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This is not a graded exercise, it is merely a test of your current ability to use Linux and the command line. If you cannot do any of the work with the command line, don't feel bad. By the end of the course you'll understand how to do all of this stuff, and why you'd care to.

New you may well ask "What does this have to do with physics?", which is a very valid question. The answer is simple, knowledge of Linux and the command line will help you to be a more efficient scientist with a broad set of tools at your disposal. This class will teach you about programming in Python in order to solve physics problems, and basic command line skills to aid you in your programming endeavors.

1. Create a new directory in your home folder called *physics*. (In the GUI).
2. Change directories to *physics*.
3. Open the terminal.
4. Make sure you are in your *home* folder.
5. Change directories to *physics*
6. Create a new directory from the terminal called *proj1*.
7. While still in the terminal, open a file in a text editor in the *proj1* directory called testing.txt.
8. Type the phrase "Hello World!" into the text editor and save the file.
9. List the contents of the directory from the terminal.
10. Search the physics directory for files containing the word "Hello". (you may want to google "grep")
11. Install the "vim" text editor from the terminal.
12. Copy testing.txt into your home folder.
13. Move testing.txt from *proj1* to its parent directory (*physics*).
14. Remove testing.txt from the home folder.
15. Calculate 2 + 2 using the terminal.
16. Show the detailed properties of the files in the physics directory.
17. Display your computer's current performance statistics.
18. Clear the screen of your terminal.
19. Print out the current date and time on the terminal.
20. Show all currently running processes in the terminal.