

Chapter 2 Lab: I/O, Variables, and Assignment

Goal: This project is intended to help you understand I/O, mathematical operations, and variable assignment. You should hand in a .py script file for each of the below problems. Please name and number the problems appropriately (something like *Ch2Lab_1_YourName.py*. You should use only coding techniques that are discussed in this chapter or previously-covered chapters. Each should contain extensive comments in the style discussed in class.

1. Create a code which prompts the user for the height and radius of a cone. The surface area (include the bottom) and volume should be displayed to the user. Make sure you let the user know what they are doing (don't just ask for two numbers and spit out some answer). Approximate π to 4 decimal places in your calculations (do not include the math library, as you have not covered that material yet).
2. Create a 5x5 times table for the numbers 1 through 5. Everything should line up nicely (learn how to use tabs, `\t`). Use variables (set $i = 1$, create a row, set $i = 2$, create a row, etc.). Make sure you have a clearly delineated header and 'lifter'.
3. Create a code which prompts the user to enter in an integer dollar value. Return the number of \$100s, \$50s, \$20s, \$10s, \$5s and \$1s which minimizes the number of bills. You may want to give the user an upper limit (so they can't enter a billion dollars). The mod operator, `%`, will be helpful.
4. Create a code which prompts the user for the following:
 - Name
 - Sex
 - Age
 - Occupation
 - Street address number
 - Street address name
 - City
 - State
 - Zip
 - Phone number

then nice prints an information card:

Name:	Yelnick J. McWawa
Sex:	M
Age:	45
Occupation:	Future President of the United States
Address:	300 East College Ave Hartsville, SC 29550
Phone Number:	(843) 383-8000