

CS 150: Intro to OOP, Spring 2012

Assignment 2

Due *via email* by 11:59pm on Feb. 5, 2012

For this assignment, you must work individually on these problems. Please note the distinction made in our academic integrity policy between general course material and work which is submitted for this course. We consider the use of the Python language syntax and the `cs1graphics` package (not needed for this assignment) in the category of general course material, which you may discuss freely. However, you must avoid any discussion of code which is specific to this assignment. You should not receive direct help from others, nor should you share your own source code with others.

1. Suppose that `numbers` is a list of values. Give a command or sequence of commands that outputs the median value from that list.

Our definition of median is the number in the list that has same number of numbers below it as above it. Make sure you consider a list with both an even number of elements and an odd number of elements. If necessary choose the smaller number. (Yes, we know this a slightly different than the mathematical definition of median.)

2. Assign identifier `numVowels` to the number of vowels in the given string `poem`. Treat upper and lower case letters as equivalent.

3. Assume that `person` is a string of the general form:

```
'firstName middleName lastName'
```

Give a command or series of commands that result in creation of the corresponding string:

```
'firstName middleInitial. lastName'
```

For example, if `person = 'Elmer Joseph Fudd'`, the the result should be `'Elmer J. Fudd'`.

4. Give the value and type of each of the expressions in the first column (a-i) of Exercise 2-27 on page 85.
5. Write the program for Exercise 2-33 on page 86 to convert from Fahrenheit to Celsius.