

## WEBD 236 Homework 4

Answer the following questions based on your reading of the text book, any supplemental material, and the instructor's presentation this week. If you use an external source (i.e. a web-page, the required textbook, or an additional book) to help you answer the questions, be sure to cite that source. You should probably always be citing a source.

### Programming

1. **[3 points]** Write a short snippet of code that sets the current timezone to EST and then prints out the current date and time as similar to "Monday, Jan 30, 2012, 3:23:41 PM, EST"
2. **[3 points]** Write a function `isLetter($ch)` that takes a character as a parameter and returns true if the character is in the range of A-Z or a-z. HINT: use the `ord()` function and test ranges.
3. **[3 points]** Write a function `myReverse($string)` that returns the parameter string reversed. Note, you should *not* use the built in PHP function that does this for you (i.e. `strrev()`).
4. **[4 points]** Write a function `isAnagram($string)` that returns true if the parameter string is an anagram (an anagram is a word or sentence that reads the same forward and backward at the character level). You should ignore non-letter characters when determining if the string is an anagram. Thus, "A man, a plan, a canal, Panama!" should return true.
5. **[12 points]** Write a function `mySoundex($name)` that computes the Soundex code for the given parameter name. Soundex is a set of rules that transforms an English name into a hash-code that can be used for similar names (so looking up a name in a database based on the soundex code will yield similar sounding names). The Soundex rules are given at <http://en.wikipedia.org/wiki/Soundex>. Note: PHP has a built-in `soundex()` function that you should NOT use for this assignment (the idea is to write it yourself). Test your function using the names "Euler", "Ellery", "Gauss", "Ghosh", "Hilbert", "Heilbronn", "Knuth", "Kant", "Leida", "Ladd", "Lukasiewicz", and "Lissajous"

### Submission instructions

Create a single PHP file with your solutions to these problems along with suitable test cases that demonstrate that they work. Follow proper coding conventions (indentation, commenting, etc.) that you would have learned in previous courses.

Submit the PHP file to the dropbox for the course.