

University of the Philippines Los Baños
College of Arts and Sciences
Institute of Computer Science

CMSC 128 Introduction to Software Engineering
2nd Semester AY 2015 – 2016
Section AB

Assign 001: Programming a Number Library

Using the assigned programming language for your section, create a library that will implement the provided functionalities as shown below.

Deadline: Feb 14, 2016 12nn Philippine Standard Time (PST)

Submission mode: An assignment link will be provided on Moodle. Put there the link of your Github repo containing your assignment. The name of the repository must be cmsc128-ay2015-16-assign001-<pl code>. For example: cmsc128-ay2015-16-assign001-js.

On Academic honesty: All students are expected to be academically honest on the submission of their assignments. Students who plagiarize and commit academic dishonesty will be given a grade of zero (0) in this activity. If the lecturer and the lab instructors see that the degree of dishonesty is overwhelming or wide scale in nature (i.e., organized and involves two or more students), the case can be elevated at the institute, college or university level. Students must at all times ensure that their code will not be copied by other students.

On working in groups and exchange of ideas: We recognize the fact that students need to exchange ideas in order also to practice your other critical faculties. However, directly copying someone's output is strictly prohibited.

On student safety: As what has been always said in this course, value your safety first. We know the importance of working extensively on academic outputs beyond prescribed hours since this is what happens in the "real" world. However, ALWAYS consider your safety a top priority. The assignment is given a head of time with sufficient time for you to work on it. Avoid going out of your dormitories, apartments and homes during the night if you do not have computers or internet connection.

On Programming Language: The following programming language will be used for each section:

Section	Programming Language	pl code
AB1L	(Native)Javascript	js
AB2L	C	c
AB3L	Python	py
AB4L	(Native)Javascript	js
AB5L	C	c
AB6L	Python	py
AB7L	(Native)Javascript	js

No student will be allowed to provide an answer written in other programming language except of those that has been prescribed.

Problem Proper:

On your assigned programming language, create a library (containing only the functions as described) to perform the following activities:

Function name	What it does	Sample Input	Sample Output
numToWords	Accepts a whole number from zero (0) to 1 million (1000000; without commas for example: 1,000,000) and prints on screen the number in word form	1234	one thousand two hundred thirty four
wordsToNum	Accepts a number in word form (from zero to 1 million) and returns it in numerical form Input must be in lowercase	one thousand two hundred thirty four	1234
wordsToCurrency	Accepts two arguments: the first argument is the number in word form (from zero to 1 million) and the second argument is any of the following: JPY, PHP, USD. The function returns the number in words to its numerical form with a prefix of the currency	'one thousand two hundred thirty four', 'USD'	USD1234
numberDelimited	Accepts three arguments: the first is the number from zero to 1 million, the second is the delimiter to be used (single character only) and third, the number of jumps when the delimiter will appear (from right most going to left most digit)	1234,',',3	1,234

This may be trivial but include a documentation in your code.

Also, it would be best to regularly push your work in your repository. Commit histories will also be reviewed.