**CPSC 1301 COMPUTER SCIENCE 1 FALL2014**

**Assignment 1 – Computational Thinking and Recycling**

Posted on 8/22/2014

**Due on Friday, August 29, 11 :59 PM EST**

**Total Points : 40**

**Work in groups of two on this assignment.**

**Problem statement:**

There are two recycling bins on the fourth floor of CCT, one for plastic bottles and one for aluminum cans.

Your task is to answer the questions:

1. how many plastic bottles can fit in one bin?
2. how many aluminum cans fit in one bin?
3. how many plastic bottles can be recycled campus wide?
4. how many aluminum cans can be recycled campus wide?
5. Which should we encourage the university community to drink from – plastic bottles or aluminum cans? Why?

Submit the following items:

1. Your answer to the questions above. (5 points)
2. A detailed description of how the problem was solved. Mention aspects of computational thinking you used to come up with your answer and describe how they were utilized. (15 points)
3. A pseudocode version of the solution algorithm (10 points)
4. A flowchart version of the algorithm (10 points)

Format of your submission:

* Write your response in a document file.
* Include **both group members’ names** (on the top right).
* Include a title in your assignment: **CPSC 1301 Assignment 1**
* Name your file <last name>\_<first name>\_Assignment1.docx>
* Submit the file in the **Assignment1 Dropbox** in CougarView
* Both you and your partner must submit the file with the work done