csce350 — Data Structures and Algorithms
Fall 2019 — Project 1

Assigned: August 30
Due: September 12, 11:59pm

For this assignment, you will implement an extremely simple algorithm. The purpose is to give you a chance to practice writing code in the form that's expected in this course.

Background   Leo, Mikey, Donnie, and Raph are having a pizza-eating contest. Each day, each of them eats a certain number of slices of pizza. Unfortunately, good pizza is expensive, so they would like to keep track of how many total slices they eat each day.

Your Task   You should write a very small C++ program that does these things:

1. First, your program should read four integers from standard input (that is, from `cin`). The numbers will all be zero or positive. (These numbers represent the number of pizza slices eaten by Leo, Mikey, Donnie, and Raph respectively on a certain day.)

2. If at least one of the four numbers is greater than zero, then add all four numbers together, and print the total to standard output (that is, to `cout`) on a line by itself. (This represents the total amount of pizza eaten by all four of them that day.) Then go back to the start and read the next line of input.

3. When the program reaches a line with all four input numbers equal to 0, this is the signal that the pizza-eating contest is over. Your program should terminate.

Here's an example run, with the input shown in italics:

```
5 6 2 0
13
3 2 77 22
104
0 0 1 0
1
6589 3219 84721 3984
98513
0 0 0 0
```

Notice that are are no extra prompts nor any extra outputs, other than what is specifically required. No "Enter the number of slices that Leo ate:" No "The total number of slices is..." Nothing like that. Notice in particular that the program could also be run, for example, by redirecting the input from an input file and comparing the output to the correct answer for that input. I will grade your programs in this way, using a Linux workstation functionally identical to the department's Linux lab machines.

What to Submit   You should submit, using the department's dropbox website, a single C++ source file named containing all of the code for your program. I will compile this program using this command line:

```
g++ -Wall -std=c++11 yourfile.cpp
```