Practice Exercise #28: Arithmetic Mean and Geometric Mean

http://www.comp.nus.edu.sg/~cs1010/4_misc/practice.html

Reference: Week 8

Date of release: 6 October 2014

Objective: Function with pointer parameters

Task statement:

Given 3 values *a*, *b* and *c*, their *arithmetic mean* (AM) and *geometric mean* (GM) are defined as follows:

$$AM = (a + b + c) / 3$$

$$GM = \sqrt[3]{a \times b \times c}$$

You should use type **float** for the means.

Write a program **means.c** to read in 3 positive integers and compute their AM and GM using a single function called **compute_AM_GM()**. You are to decide on the parameters. There should be no **printf()** statement in this function.

The output should display the means in 2 decimal places.

Sample runs:

```
Enter 3 positive integers: 1 2 3
Arithmetic mean = 2.00
Geometric mean = 1.82

Enter 3 positive integers: 21 5 98
Arithmetic mean = 41.33
Geometric mean = 21.75
```