Problem Set 1 Exercise #13: Arithmetic Mean and Geometric Mean

Reference: Week 3 Lecture notes

Learning objective: Writing functions

Estimated completion time: 25 minutes

Problem statement:

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

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

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

Write a program **means.c** to read in 3 positive integers and compute their AM and GM using two functions called `compute_AM()` and `compute_GM()`.

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

The output should display the means in 2 decimal places.

Sample run #1:

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

Sample run #2:

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