Python – Equilateral Triangle

Purpose

This lab was designed to teach you how to process data via a function and output the result.

Description

Write a function that calculates the area of an equilateral triangle given the side length.

$$\text{area} = \frac{side^2\sqrt{3}}{4}$$

Write a method called *area* that calculates the area of an equilateral triangle and returns the result. The default value for side is 1. Round the result to two decimal places. Python has a built-in round function.

round(1.3779, 3) -> 1.378 # the second argument is optional and specifies the precision

Use proper structure in your program.

Program Shell

Create a file called triangle.py

Sample Data

```
5
3
6
4
13
      # invoke with no argument
37
```

Sample Execution

```
An equilateral triangle w/ side length 5 has an area of 10.83
An equilateral triangle w/ side length 3 has an area of 3.9
An equilateral triangle w/ side length 6 has an area of 15.59
An equilateral triangle w/ side length 4 has an area of 6.93
An equilateral triangle w/ side length 13 has an area of 73.18
An equilateral triangle w/ side length 13 has an area of 0.43
An equilateral triangle w/ side length 37 has an area of 592.79
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