

Basic Data Types Challenge 4:

Right Triangle Solver App

Description:

You are responsible for writing a program that will calculate the hypotenuse and area of a right triangle given its two bases. Your program will round all calculations to a precision of three decimal places and provide a summary of the mathematical results.

Step By Step Guide:

- Print a welcome message.
- Get user input for the first leg of the right triangle.
- Get user input for the second leg of the right triangle.
- Calculate the hypotenuse of the right triangle using the Pythagorean theorem.
 - We can't actually take a square root with basic Python. In order to take a square root, we will need to import a library of extra code.
 - Type `import math` as the first line of code in your program.
 - This allows us to access higher level mathematical functions such as the square root function `sqrt()`.
 - Google how to take a square root using the math library.
- Calculate the area of the right triangle.
- Round each value to 3 decimal places.
- Print a message to the user informing them of both the hypotenuse and area of the given triangle.
- Use at least 2 comments to describe sections of your code.
- "Chunk" your code so that is readable.
- Use appropriate and informative variable names.
- Format your output as below.

Example Output:

```
Welcome to the Right Triangle Solver App
```

```
What is the first leg of the triangle: 20
```

```
What is the second leg of the triangle: 40.5
```

```
For a triangle with legs of 20 and 40.5 the hypotenuse is 45.169.
```

```
For a triangle with legs of 20 and 40.5 the area is 405.0.
```