Day 13: Abstract Classes

Objective

Today, we're taking what we learned yesterday about *Inheritance* and extending it to *Abstract Classes*. Because this is a very specific Object-Oriented concept, submissions are limited to the few languages that use this construct. Check out the <u>Tutorial</u> tab for learning materials and an instructional video!

Task

Given a *Book* class and a *Solution* class, write a *MyBook* class that does the following:

- Inherits from Book
- Has a parameterized constructor taking these 3 parameters:
 - 1. string *title*
 - 2. string *author*
 - 3. int *price*
- Implements the *Book* class' abstract *display()* method so it prints these **3** lines:
 - 1. Title:, a space, and then the current instance's title.
 - 2. Author:, a space, and then the current instance's author.
 - 3. Price:, a space, and then the current instance's price.

Note: Because these classes are being written in the same file, you must not use an access modifier (e.g.: public) when declaring *MyBook* or your code will not execute.

Input Format

You are not responsible for reading any input from stdin. The *Solution* class creates a *Book* object and calls the *MyBook* class constructor (passing it the necessary arguments). It then calls the *display* method on the *Book* object.

Output Format

The $void\ display()$ method should print and label the respective title, author, and price of the MyBook object's instance (with each value on its own line) like so:

Title: \$title Author: \$author Price: \$price

Note: The \$\\$ is prepended to variable names to indicate they are placeholders for variables.

Sample Input

The following input from stdin is handled by the locked stub code in your editor:

The Alchemist Paulo Coelho 248

Sample Output

The following output is printed by your *display()* method:

Title: The Alchemist Author: Paulo Coelho

Price: 248