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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 Tutorial 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

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Easy Submitted 53225 times Max Score **30**

```
Current Buffer (saved locally, editable) & 🗗 🔾
                                                                                  Python 3
                                                                                                                     \Box
 1 from abc import ABCMeta, abstractmethod
 2 ▼ class Book(object, metaclass=ABCMeta):
        def __init__(self,title,author):
 3 ▼
             self.title=title
 5
             self.author=author
 6
        @abstractmethod
 7
        def display(): pass
 8 #Write MyBook class
10 title=input()
11 author=input()
12 price=int(input())
new_novel=MyBook(title,author,price)
new_novel.display()
                                                                                                            Line: 4 Col: 1
```