SOLID Principles Exercise

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Software Architecture and Design

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The 1st Problem: Rectangle & Square

◈ Please find the initial source files for this problem from:
https://kmitlthailand.sharepoint.com/sites/SoftwareArchitectureandDesign/Shared%20Documents/General/2021/Materials/SOLID%20LSP.zip

◈ You should find the following files inside the downloaded zip:

◈ Rectangle.java
Rectangle class contains width, height, and a method to calculate area.

◈ Square.java
Square class extends Rectangle and override some of its methods.

◈ Main.java
Main.java demonstrates the problem. Feel free to edit the file as you see fit.

◈ **Please refactor the Rectangle and Square class to avoid the problem from LSP violation!**

The 2ⁿᵈ Problem: Book Printing

◈ Please find the initial source files for this problem from:
https://kmitlthailand.sharepoint.com/sites/SoftwareArchitectureandDesign/Shared%20Documents/General/2021/Materials/SOLID%20Book.zip

◈ You should find the following files inside the downloaded zip:

  ◇ Book.java
  Book class contains title, pages (a list of strings) and methods to print pages.

  ◇ BookReader.java
  BookReader class demonstrates how a reader print pages from an instance of Book.

  ◇ BookPublisher.java
  BookPublisher class demonstrates how a publisher print pages from an instance of Book.

◈ **Please refactor the Book class to avoid the problem from SRP & ISP violation!**

About refactoring

◈ Feel free to add new files if you see fit!

◈ Please doo not edit some part of the files as indicated by the comments.

◈ This exercise is worth 2% !!

◈ Please **DO NOT REMOVE** the code on your GitHub until your grade is out!!

◈ If any question, feel free to ask.

Please submit the refactored code before 23:45 on 4th October 2021:
https://forms.office.com/r/jj3DN5wWsM