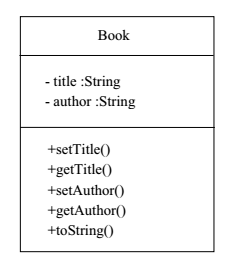
CSD 221 Lab 1

1. Clone the class repository from here:  
     
   <https://github.com/SaultCollege/CSD221_FredCarella_public_mvn_git.git>
2. Create a maven based, java project in Netbeans 8.2 for this course called   
     
   CSD221\_W19\_<FirstnameLastname>   
     
   for example  
     
   CSD221\_W19\_FredCarella  
     
   Push the project to gitlab using the account you already have from CSD211.
3. The URL to your project is:  
   Gitlab: https://gitlab.com/ca.saultcollege.csd221.w19.jonathan\_kelly/csd221\_w19\_jonathankelly.git

**Answer the following questions based on Lecture 1**

1. Define the structured programming paradigm.  
   Structured programming is a programming aimed at improving the clarity, quality, and development time of a [computer program](https://en.wikipedia.org/wiki/Computer_program) by making extensive use of the structured control.
2. Define the OOP programming paradigm.

Object-oriented programming (OOP) is a  based on the concept of "[objects](https://en.wikipedia.org/wiki/Object_(computer_science))", which may contain [data](https://en.wikipedia.org/wiki/Data), in the form of [fields](https://en.wikipedia.org/wiki/Field_(computer_science)), often known as *attributes;* and code, in the form of procedures, often known as [*methods*](https://en.wikipedia.org/wiki/Method_(computer_science))

1. What’s the difference between the structured programming and OOP paradigms?  
   The key difference between Structured Programming and OOP is that the focus of Structured Programming is to structure the program in to a hierarchy of subprograms while, the focus of OOP is to break down the programming task in to objects, which encapsulate data and methods.
2. What are the benefits of OOP?  
   Object orientation solves many problems which are associated with the development and quality of software products. New technology gives greater programmer productivity.
3. What are the 5 OOP principles. Briefly describe each.  
   The four principles of object-oriented programming are encapsulation, abstraction,inheritance, and polymorphism
4. What exactly is OOP?  
   Object-oriented programming (OOP) is a programming language model organized around [objects](https://searchmicroservices.techtarget.com/definition/object) rather than "actions" and data rather than logic.
5. What is Object Oriented Analysis?  
   Object-oriented analysis and design (OOAD) is a popular technical approach for analyzing and designing an application, system, or business by applying [object-oriented programming](https://en.wikipedia.org/wiki/Object-oriented_programming), as well as using visual modeling throughout the [development life cycles](https://en.wikipedia.org/wiki/Software_development_process) to foster better stakeholder communication and product quality.
6. In preparation for the next lecture, use Lucidchart to create the UML class diagram on page 26 of your text. Include the diagram in the lab and supply a link to it (click on the Share button to get the link).  
   
7. Upload the completed lab to lms.

https://www.lucidchart.com/invitations/accept/706fd5a1-d259-4062-8832-f86a518a6499