ITAS 185 – School Application Workshop

Create a new BlueJ Project called ITAS185_School01
(use your own name!) and complete the objectives described below.

Objectives:

1. Create a Textbook class with fields to store:
   (See below for examples of data to be stored)
   - The title of the book
   - The price of the textbook
2. Create a Textbook constructor. The constructor should accept parameters to initialize both textbook fields.
3. Implement setters and getters for all fields.

4. Create an Instructor class, with fields to store:
   - The first name of the instructor
   - The last name of the instructor
5. Implement setters and getters for all fields.

DO NOT CREATE A CONSTRUCTOR FOR THE INSTRUCTOR ;)

6. Create a Course class, with fields to store:
   - The course number (for example, ITAS185)
   - The number of students enrolled in the course
   - The textbook used in the course
   - The instructor assigned to teach the course
   - If the course is currently active or not

7. Write a Course constructor. The constructor should accept parameters to initialize the 'course number' and 'number of students' fields only. Set the instructor and textbook fields to null, and set the course as not active.
8. Write accessor for all fields in the Course class.
9. Write mutator methods for the instructor, textbook, and course active fields in the Course class.

10. Write a CourseDemo application. In the main method, create local variables suitable for storing:

    - A textbook object
    - An instructor object
    - A Course object.

    Do not assign any values to these variables in this step.

11. In CourseDemo, create a Scanner object to read input from the keyboard, and assign it to a local variable.

12. In CourseDemo, create a new course using Literal values (see below for suggested values)

13. In CourseDemo, prompt the user to enter the title of the book, then use the Scanner to get the textbook title from user input. Do the same for the textbook's price. Use these input values to create a new Textbook object and assign it to the local variable created in step #9.

14. Create a new Instructor object and assign it to the local variable created in step #9.

15. In CourseDemo, prompt the user to enter the first name of the instructor, then use the Scanner to get the first name from user input. Do the same for the instructor's last name. Use these input values to set the first and last name fields in the Instructor object.

16. Use the mutator methods of the Course object, to assign the textbook and instructor to the course.

17. Set the textbook and instructor fields to null.

18. In CourseDemo, print all the information about the course by calling the accessor methods available in the course, textbook, and instructor objects. Format the output similar to this: (don't worry about formatting the price to two decimals)

```
Course
------------------------
Course Number: ITAS185
Instructor: Mark Dutchuk
Number of Students: 25
Textbook Title: Fun with Java
Textbook Price: $123.45
```