OOP - Exercises

1. Make a program that can print out "drive" method in a OOP way.
   a. Create a class "Car" with the following fields:
      id, year, model, colour, motorSize.
   b. Create a public method "drive" inside "Car" which will print:
      model + " with motor " + motorSize + " can drive now."
   c. In the main program make instance of "Car" and call the method "drive".

   - Covering class design and instances

2. Make a program that prints out the area on a rectangle in a OOP way.
   a. Create a class "Rectangle" with the following fields:
      height, width. (both should be double values.)
   b. Make two constructors, one default constructor without parameters and the second constructor which should take two parameters (height and weight).
   c. Add getter and setter for height and width fields.
   d. Write public method "getArea" which will return area (height*weight).
   e. In the main program create instance of that "Rectangle" and ask user for height and width and then print calculated area.

   -Covering Constructors, getters, and setters

3. Make a program that demonstrates the relationship between Classes.
   a. Create a class "Author" and create a class "Book".
   b. Create the appropriate relationship between "Author" and "Book".
      i. One book can be written by only one author.
      ii. One author can write one or more books.
   c. In the main program create an array of authors where each author has at least one book.
   d. Add a method that prints all books that have been written by a specific author.
   e. Add another method to print the author of a specific book.

   -Covering relationship between Classes.