Challenge 1: Implement the Rectangle Class Using the Concepts of Encapsulation

Can you implement the rectangle class using the concepts of encapsulation? A solution is placed in the "solution" section to help you, but we would suggest you try to solve it on your own first.

WE'LL COVER THE FOLLOWING

Problem Statement

You are given a partially completed code of a `Rectangle` class in the editor. Add two fields i.e. `length` and `width` and modify the default and parametrized constructors which assign parameters to the `length` and `width` fields of the `Rectangle` class. In the end, Implement the `getArea()` method which returns the area of the rectangle.

Input

```
Calls the constructor by passing length and width.
Calls the `getArea()` method to return the area.
```

Output

```
Returns the area of a rectangle.
```

Sample Input

```
Rectangle obj = new Rectangle(2, 2);
```

Sample Output

```
4
```

Coding Exercise

First, take a close look and design a step-by-step algorithm before jumping to the implementation. This problem is designed for your practice, so initially try to solve it on your own. If you get stuck, you can always refer to the solution provided in the solution review.

Good Luck!

```
// Rectangle Class
class Rectangle {

  // Write Fields Here


  public Rectangle() {

    // Write your code here

  }

  public Rectangle(int length, int width) {

    // Write your code here

  }

  public int getArea() {

    // Write your code here
    return 0;
  }

}
```

The solution will be explained in the next lesson.