

Methods Activity

Create a project **methods** with a new class **MethodsActivity**.

Create a **Scanner** object **outside** of the **main()** method with a **static** modifier, and **close** the scanner **inside** the **main()** method, after all of the function calls:

```
1  import java.util.Scanner;
2
3  public class MethodActivity {
4      static Scanner scanner = new Scanner(System.in);
5
6      public static void main(String[] args) {
7          // function calls here
8
9
10         scanner.close();
11     }
```

The static keyword will allow the scanner to be used in all of the functions without having to create a new scanner in each one. Close the scanner then after the functions have been called and executed.

Write the following methods that are called within the main method.

*Some will have parameters, some will not. Some return values, some do not.

- **getLength**
 - asks the user to enter the rectangle's length and return the value as a double
 - **getWidth**
 - asks the user to enter the rectangle's width and return the value as a double
 - **getArea**
 - accepts the length and width as arguments and returns the rectangle's area ($l * w$) as a double.
 - **displayData**
 - accepts the length, width, and area as arguments and displays each on a separate line with label
- example output:

```
Enter the length of a recangle
3.5
Enter the width of a recangle
7.2
rectangle length: 3.5
rectangle width: 7.2
rectangle area: 25.2
```

Submit **MethodsActivity.java** file to Canvas.