

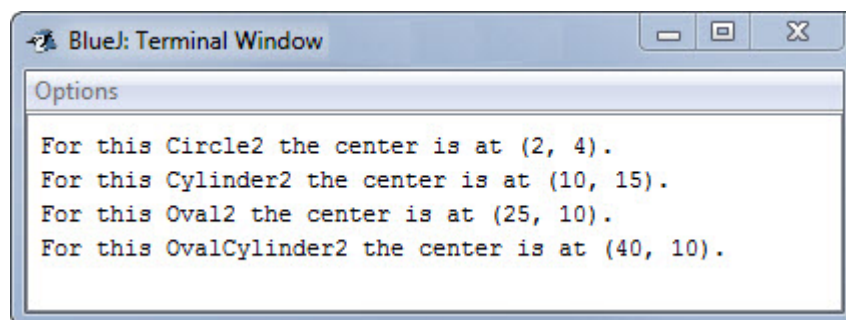
## 13.03 Assignment Instructions

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Modify the classes related to circles to demonstrate polymorphism.

1. Create a new project called 13.03 Assignment in the Module 13 Assignments folder.
2. Download the Java files to the newly-created project folder.
  - **Circle2.java**
  - **Cylinder2.java**
  - **Oval2.java**
  - **OvalCylinder2.java**
3. Update each circle implementation class to include a `getName` method that will return the name of the circle. For instance, the `Circle2` class should return just `Circle`.
4. Create a new client class that will be used to test the circle classes. Be sure to update the heading to include the program's purpose, your name, and today's date.
5. In the main method, declare and initialize at least one new instance for each of the circle classes.
6. Use an `ArrayList` to better organize the circles. Add each of the new objects to the `ArrayList`.
7. In the tester program, create a static method named `showCenter`. This method will accept as a parameter any object related to a circle. The method will output the result of calling the `getCenter` method that all the circle classes have in common. See the sample output below.
8. In the main method, test the `showCenter` method on each circle object stored in the `ArrayList`.

**Expected Output :** When your program runs correctly, the output should resemble the following:



```
BlueJ: Terminal Window
Options
For this Circle2 the center is at (2, 4).
For this Cylinder2 the center is at (10, 15).
For this Oval2 the center is at (25, 10).
For this OvalCylinder2 the center is at (40, 10).
```



