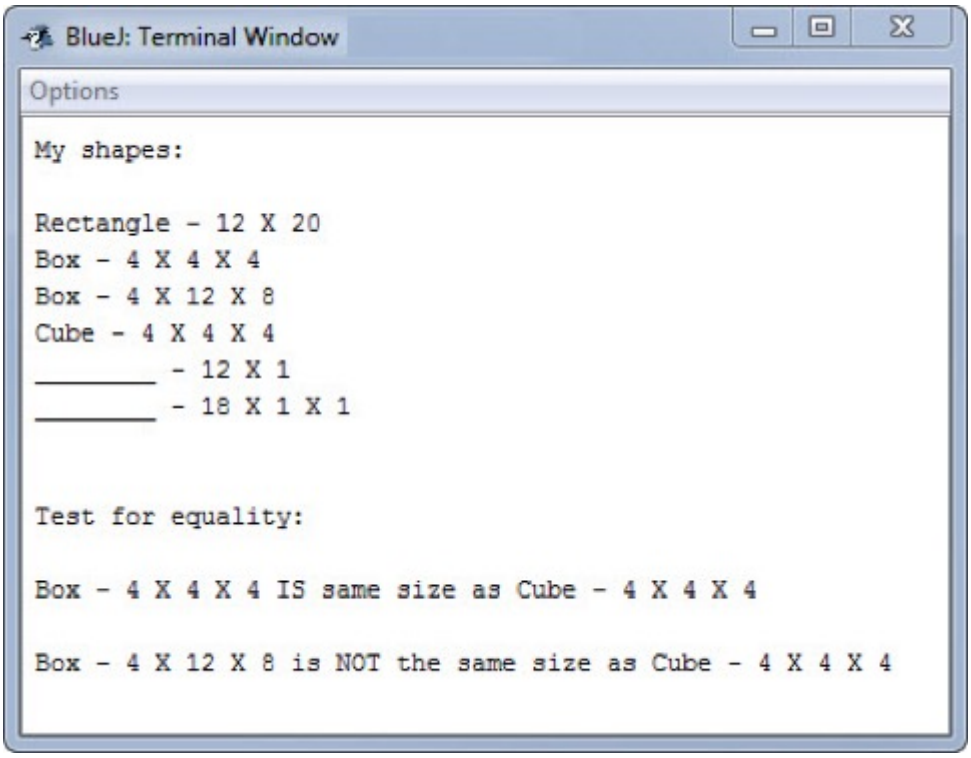
13.04 Assignment Instructions

Instructions: Modify the shape classes override the `toString` and `equals` methods.

1. Create a new project called 13.04 Assignment in the Module 13 Assignments folder.
2. Copy your `Rectangle` and `Box` classes to the newly-created folder. Rename each class to version 4. Be sure to change the file name and the class statement.
3. Create a client class to test the shape implementation classes. Add an appropriate `main` method. As this project is completed, declare new instances of a shape class as needed. You may have more than instance of any given class. For instance, you may decide to test with three boxes and two rectangles.
4. The tester class needs to include a `showEffectBoth` static method. Use the sample programs as a model. The method needs to demonstrate `toString` method work.
5. Create a new class named `Cube4` that extends `Box4`. A cube is a box where the value for its length, width, and height are all the same. Use the existing classes as a model.
6. Define two more implementation classes for shapes of your choice. Choose shapes within the quadrilateral or rectangular prism families. Use the existing implementation classes as a model.
7. Each implementation class must override the `Object` class `toString` method by providing the name of the class followed by the shape's dimensions.
8. As needed, update the implementation classes to override the `Object` class `equals` method, so that it can be determined when shapes are equal based on the values of their dimensions. Some classes should inherit the `equals` method. For instance `Cube` will inherit the `equals` method of the `Box` class rather than override it.

Expected Output: The following image shows a sample of the output this project could display. The values and results will vary based on your program.


BlueJ: Terminal Window
Options
My shapes:
Rectangle - 12 X 20
Box - 4 X 4 X 4
Box - 4 X 12 X 8
Cube - 4 X 4 X 4
_____ - 12 X 1
_____ - 18 X 1 X 1
Test for equality:
Box - 4 X 4 X 4 IS same size as Cube - 4 X 4 X 4
Box - 4 X 12 X 8 is NOT the same size as Cube - 4 X 4 X 4

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