

**Assignment 15**  
(Java Programming Practices)  
(Due **in lab** on **Tuesday**, 4/27/2010)

Your name:	Score:
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## Important Notice:

1. Have the Instructor check your submission by the **due time**:
    - If you **cannot** complete by due time, you need to submit your project by **email** (attach your project in a **single compressed file with meaningful names** for your projects and file(s)).
    - Late-submission **penalty** will be applied for any submissions after the due time.
  2. The full score for this assignment is 100 points, **20%** of which go to your **Java code programming style** (if you have followed the Java Code Convention).
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1. Create a NetBeans project for Fig. 4.18 and Fig. 4.19 to reproduce the GUI demo. Write (**handwrite**) the project code (**2 classes**) in the following space.

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2. Create a NetBeans project for Fig. 5.26 and Fig. 5.27 to reproduce the GUI demo. Write (**handwrite**) the project code (**2 classes**) in the following space.

3 (**Bonus: 0~40 points**). Modify the above two projects such that they produce some funny or interesting shapes, diagrams, pictures...that *amuse yourself, others, and/or the instructor*.

4 (**Bonus: 60 points**) Create a NetBeans project that draws 12 concentric circles in the center of a JPanel. The innermost circle should have a radius of 10 pixels, and each successive circle should have a radius 10 pixels larger than the previous one. Begin by finding the center of the JPanel. To get the upper-left corner of a circle, move up one radius and to the left one radius from the center. The width and height of bounding rectangle are both the same as the circle's diameter (i.e., twice the radius).