

Exercises for Programming Practice 1

The submitted program will be evaluated as described in “Lesson Plan (2021)”.

Note:

- ✓ Do not create “module-info.java”, when you create a Java Project.
- ✓ Do not set Package name in the window “New Java Class”.
- ✓ The following information must be included as a comment at the first part of the program.
 - Contents of the program
 - ✧ Do not use the title of exercise for “contents of the program”
Think about “contents of the program” yourself.
 - Submission date
 - Program creator
- ✓ Wrong file name (including case sensitivity) is not accepted.

The deadline for submitting the programs is 17:50 on November 2th, 2021.

Exercise 9 (file name “Exercise9.java”)

Create Java program “Exercise9.java” which satisfies the following conditions.

- (1) The width and height of the window used are both 500 pixels.
- (2) A square with a horizontal and vertical length of 50 pixels centered on the pressed coordinates is drawn.
- (3) A square filled green is drawn with a single press.
- (4) A square filled red is drawn with a double press.

An example of execution is shown in Figure 1.

Refer the program in “4. (B) Double Click” of “AWT Event Handling” (The sixth day).

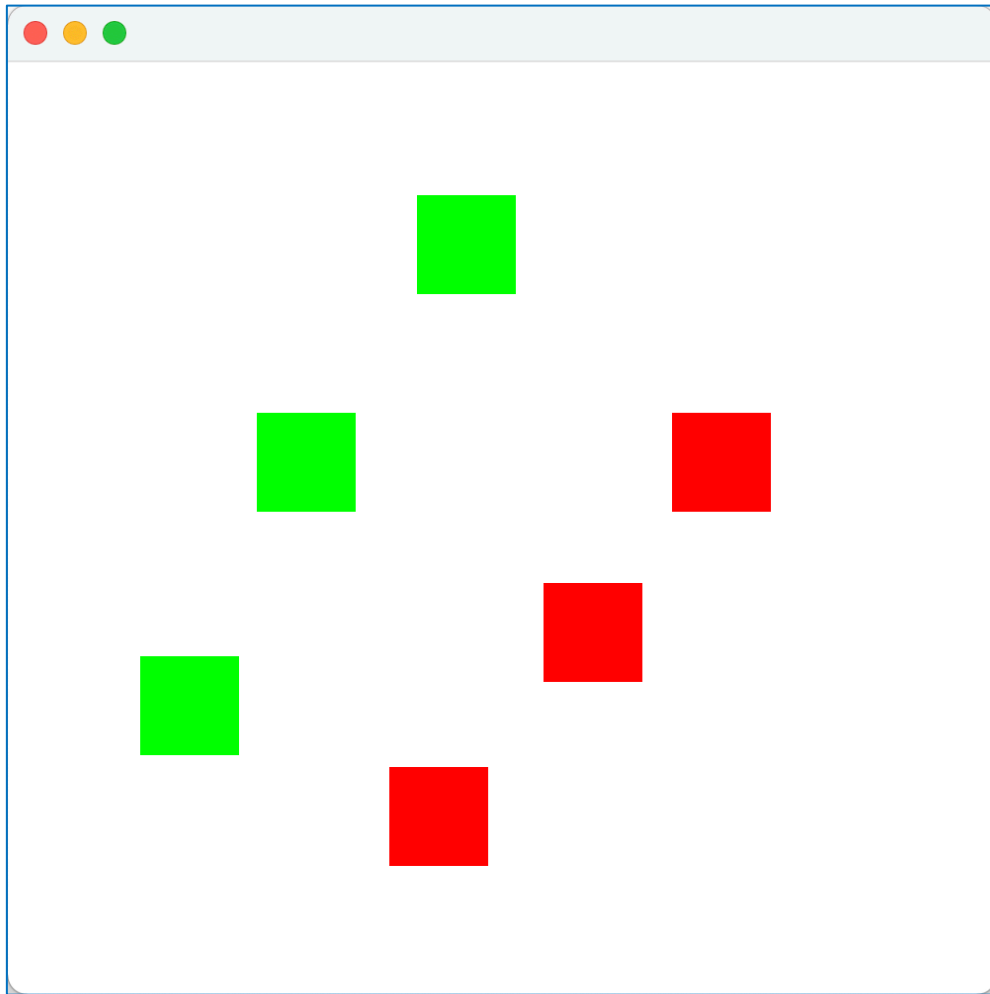


Figure 1. An example of “Exercise9.java” execution.

Exercise 10 (file name “Exercise10.java”)

Create Java program “**Exercise10.java**” which satisfies the following conditions.

- (1) The width and height of the window used are both 500 pixels.
- (2) A square with a horizontal and vertical length of 50 pixels centered on the clicked coordinates is drawn.
- (3) A square filled red is drawn by pressing the right button.
- (4) A circle filled blue is drawn by pressing a button other than the right.

An example of execution is shown in Figure 2.

Refer the program on “4. (C) Right Click” of “AWT Event Handling” (The sixth day).

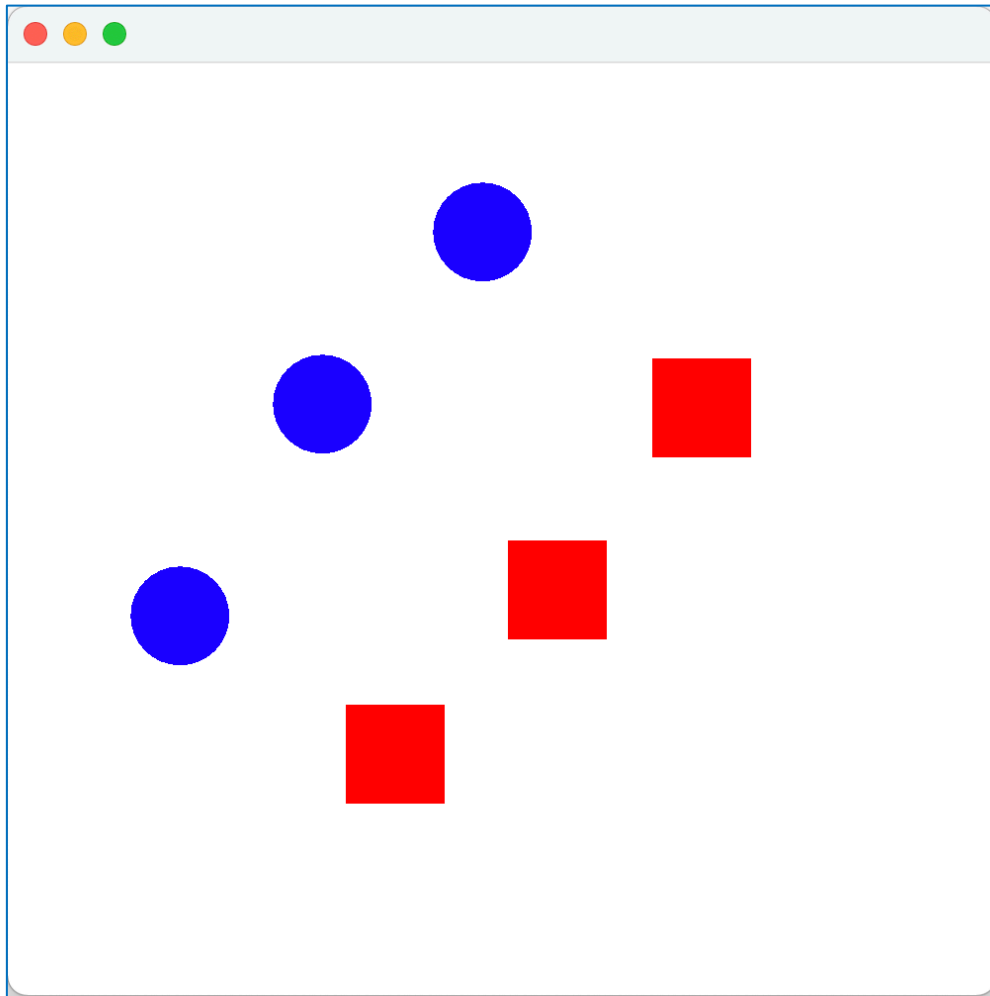


Figure 2. An example of “Exercise10.java” execution.

Exercise 11 (file name “Exercise11.java”)

Create Java program “Exercise11.java” satisfies the following conditions.

- (1) The width and height of the window used are both 500 pixels.
- (2) The shape of Pac-Man in yellow is drawn using “mousePressed” method and “mouseDragged” method. The mouth of Pac-Man is open on the right side at an angle of 60 degrees. Use fillArc method to draw a Pac-man.
- (3) When pressing the mouse button, the x coordinate and y coordinate are record as the center of Pac-Man.
- (4) Every time it is dragged, the size is calculated using the distance between the center coordinate and the mouse. Pac-Man is drawn with the calculated size.

An example of execution is shown in Figure 3.

Refer the program on “4. (D) Mouse Motion” of “AWT Event Handling” (The sixth day).

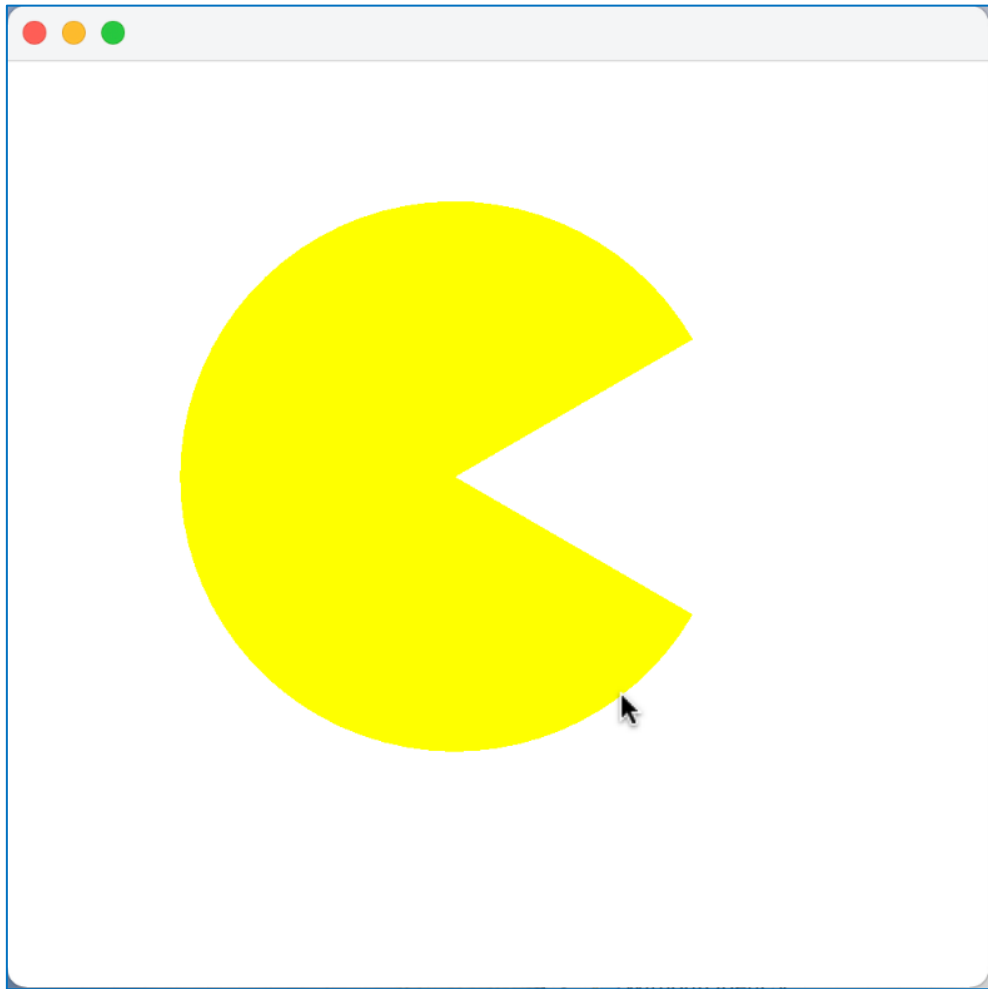


Figure 3. An example of “Exercise1 1.java” execution.