

## Exercises for Programming Practice 1

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

Download “Painter6.java”, “Painter7.java”, “Painter8.java” and incomplete “Face.java” from “Java 05” page Resource of “Programming Practice 1”, manaba+R.

The width and height of the window used in Exercises 6 to 8 are both 500 pixels.

**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

Submit “Face.java” that satisfies Exercises 6 to 8 to the title “Exercise6to8” on the Assessments page of the “Programming Practice 1” course in manaba+R. If the operation is confirmed by “PainterN.java” (N = 6, 7, 8), it is considered that the task of “Exercise N” has been achieved.

The created “PacMan.java”, “PacManWithEye.java” and “PacManWithSmile.java” do not need to be submitted.

The deadline for submitting the programs is 18:00 on October 28th, 2021.

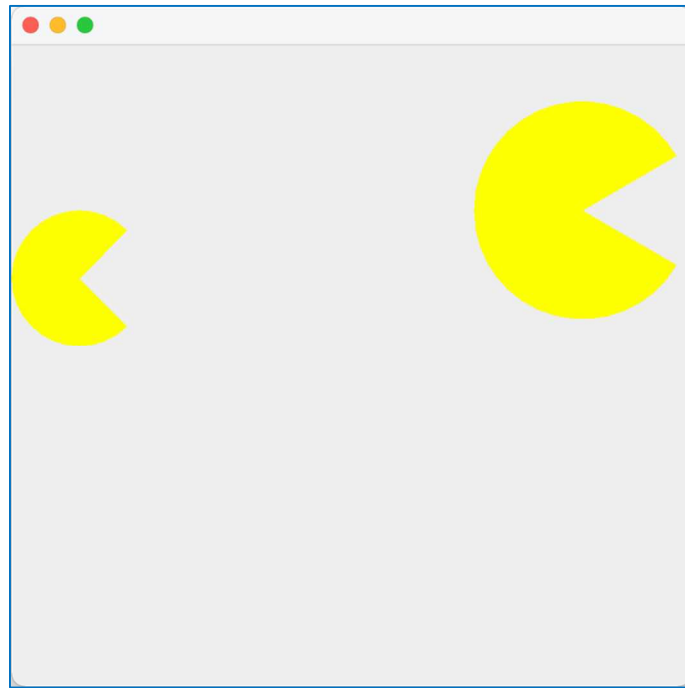
### Exercise 6 (file name “Face.java”)

Complete method “public void setXCenter(int num)” in “Face.java” according to the instructions on page 4 of “Encapsulation”, the fifth day. This method prevents Pacman from protruding from the screen in the x direction.

Create “PacMan.java” that inherits Face.java. Refer Figure 12 on page 12 of “Encapsulation”, the fifth day.

Execute “Painter6.java” and check if the same drawing as the expected output is drawn in the window.

*Expected Output:*

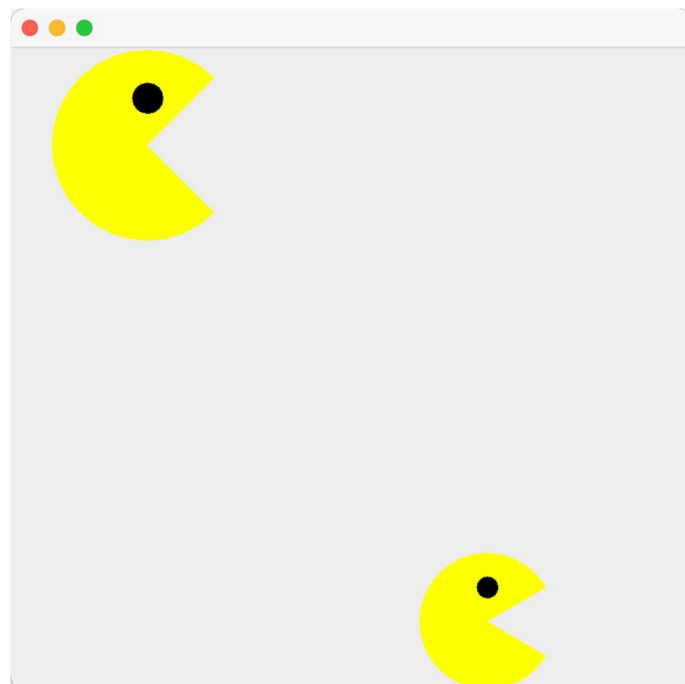


### **Exercise 7 (file name “Face.java”)**

Complete method “public void setYCenter(int num)” in “Face.java” according to the instructions on page 4 of “Encapsulation”, the fifth day. This method prevents Pacman from protruding from the screen in the y direction.

Create “MacManWithEye.java” that inherits Face.java, then execute “Painter7.java” and check if the same drawing as the expected output is drawn in the window.

*Expected Output:*



### Exercise 8 (file name “Face.java”)

Complete method “public void setSize(int num)” in “Face.java” according to the instructions on page 4 of “Encapsulation”, the fifth day. This method prevents Pacman from protruding from the screen.

Create “MacManWithSmile.java” that inherits Face.java, then execute “Painter8.java” and check if the same drawing as the expected output is drawn in the window.

*Expected Output:*

