

**CMPS 5J – Program 2**  
**Summer 2018**  
**Due: Thursday July 5 @ 11:59pm**

**Objective**

The objective of the assignment is for you to begin working with variables to improve the readability and modifiability of your program. You will also become familiar with the two standard Processing functions that you must define (setup() and draw()) as well as some system variables such as mouseX, and mouseY. You will become familiar with the notion of frames and the fact that draw() is called repeatedly, allowing your sketch to change over time and respond to some action of the user's (i.e. moving the mouse).

**Program Specification**

You can either expand on your program 1 submission or start a new drawing. Starting a new sketch is preferred. For this assignment you must include some type of interaction or animation. The program must include a background such that shapes moving over the background do not leave a trail. The background must have at least 3 shapes. Your program should have at least 3 shapes moving according to user input (for example, but not restricted to, using mouseX and mouseY). In total, you will have 3 background shapes and 3 shapes moving to user interaction – 6 shapes in total, at a minimum.

An excellent program will also make some use of user defined variables to control the placement and/or size of one or more objects from the drawing in such a way that the object can be replicated by copying and pasting the lines used to draw the object and then modifying the values of the variables.

**What to turn in**

Turn in a .pde file called program2.pde to Canvas.

**Grading**

- 2.0 Did they submit a .pde file?
- 1.0 Does the program include an opening block comment that includes a description of the program?
- 1.0 Is the code tidy and well organized?
- 2.0 Does the sketch run without errors when you click play?
- 2.0 Are there at least 3 shapes being drawn in the background?
- 2.0 Is there some type of interaction happening with 3 shapes? (i.e. using mouseX, keyPressed(), pmouseX, etc.)