## CMPS 5J – Program 4 Spring 2018

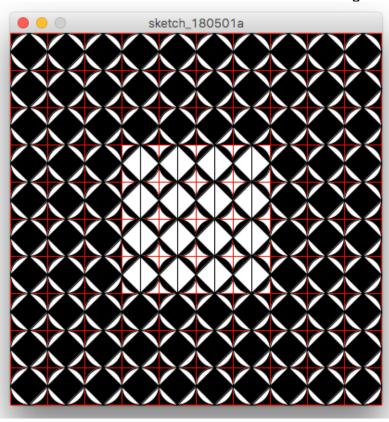
**Due: Monday May 14 @ 11:59pm** 

## Goal

The purpose of this assignment is to create a sketch that duplicates the output of an unknown mystery sketch using an efficient program.

## **Assignment**

Your task is to create a sketch that draws this image:



You are not allowed to use images, you must recreate the image using drawing commands such as rect(), triangle(), ellipse(), etc.

Your code should be utilizing a set of nested for loops (one for loop inside the other – see examples from the slides in chapter 6). You may use a set of nested while loops if you choose to.

Your final code should be as short and compact as possible. Also think about (although not required) defining functions and calling them instead of copying and pasting code.

Do not include any unused code. Add comments to explain what the different parts of your code are doing. Make sure your indentation is correct everywhere in the code.

You should submit your pde file called program4.pde to Canvas.

## **Grading Rubric**

Like all programming assignments, this assignment is graded out of 10 points.

- 1.0 Does the sketch run without errors when you click play?
- 2.0 Does the sketch draw the correct image?
- 1.0 Does the sketch include any unused code? Look for explanations. (Lose points for unused code).
- 2.0 Is the code commented? Is indentation correct? Is the code tidy?
- 2.0 Does the sketch reuse code as much as possible? Take off points for duplicated code. (A set of nested for-loops should be used.)
- 2.0 Are there any other problems with the code? Take off points for any other issues you find (using images, redrawing the same thing many times uselessly, etc.)