Assignment 06

- Most popular combos
  - sepia/negative/tint
  - obamicon
  - pointillism
  - sharpen/blur
- Comment your filters!
- Filter originality/ creativity
- Collage arrangement
- Use an array of PImage
- Use a loop
- Use the pixel functions associated with an image, not those that apply to the entire sketch
  - img.loadPixels()
  - img.pixels[]
  - img.updatePixels()
- You need 2 image files for convolution!

Convolution on the same source and desination

Exam Review

Resources

- Exam Week Office Hours
  - Monday 5/2 2pm-4pm
  - Professor Cooper
    - Tuesday (5/3) 1pm-2pm
    - Wednesday (5/4) 1pm-2pm
- Last Quiz
  - longer than usual
  - ungraded, solutions provided

Topics

- 1d array
- classes/objects
- recursion
- transformations
- 2d array
- strings
- ArrayList

Arrays

- Declaration
- Creation
- Initialization
- General iteration/access
- Functions that take and return arrays
- Arrays that store objects

Classes/Objects

- Creating/designing a class
- Constructors
  - parameters
  - initialization
- Methods
- Object creation
- Object storage in arrays
- Object manipulation with loops+arrays
- `null`

Recursion

- Understanding the recursive principal
- Base case
- Recursive call

Transformations

- translate()
- rotate()
- scale()
- pushMatrix()
- popMatrix()
- order of transformations

Strings

- Declaration
- Creation/initialization
- String methods
  - length()
  - equals()
  - indexOf()
  - substring()

2D Array

- Is an array of 1D arrays
- `arr.length`
- `arr[i].length`
- ragged 2D arrays

ArrayList

- Declaration
  - parameterized type
- Creation
- Traversal
- size()
- get(i)
- Insertion
- Removal

Odds and Ends

- When asked to write code segments, functions, etc, you do not need to write a complete program
  - no need for void setup()
  - size()
  - etc
- Perform full traces and write down intermediate values whenever possible