## Design Document First Draft Ellison Domingo Erinstagram

## **Functions** -

main()

Functionality: Present user with menu (load image, display current image, edit current image, exit program), perform different actions based on user's menu choice

loadImage()

Functionality: Ask user for file name, connect a file pointer to file if possible, copy file's content into a 2D array

displayImage()

Functionality: Repeat the following for each row: Repeat the following for each column: Display on the screen the value of the array at the current position, then move to the next one

editMenu()

Functionality: Present user with menu (crop, dim, brighten), perform different actions based on user's menu choice, then ask user if they want to save the edited image to a file; if so, prompt for a file name, then return to main menu

crop()

Functionality: Prompt user for a smaller section of the original image (can't be smaller than the original image), create a new array of the provided dimensions, write into the new array using the provided section of the original image as a reference

dim()

Functionality: For each element in the array, read the element and set it to the equivalent of one brightness level lower (if not already at lowest)

brighten()

Functionality: For each element in the array, read the element and set it to the equivalent of one brightness level higher (if not already at highest)

saveImage()

Functionality: Write the array with the edited image into the user-designated file