## Data

userInput – char

File Pointer, image

Image array[strings][strings]

tempArray[strings][strings]

## Functions

### main()

**Data:** User Input

**Functionality:** A prompt and then a switch to access all of the other functions.

### loadNew()

**Input:** File Pointer, Array of image,

**Output:** none

**Functionality:** This function should attempt to store the values of the image from 0-4 in a 2D array

### display()

**Input:** Array of Image

**Output:** none

**Functionality:** The function should check to make sure an image is loaded, then it should print the 2D array in the proper format

### edit()

**Input:** User input

**Output:** none

**Functionality:** This function should call a second menu with a switch that allows the user to choose from crop, dim, brighten, rotate, or quit back to the main menu.

### crop()

**Input:** Array of Image, cropArray, previousArray

**Output:** none

**Functionality:** Subtracting the complement of the cropArray from the image. I think just storing the values in the crop array and then back into the array of image would work. It should also store the array of image as previousArray, display it, and then include an undo button.

### dim()

**Input:** Array of Image, tempArray, previousArray

**Output:** none

**Functionality:** Subtract 1 from the value of every image then display the image. Ask if the user would like to confirm, then save as the current array of the image

### brighten()

**Input:** Array of Image, tempArray, previousArray

**Output:** none

**Functionality:**

It should increase the value of all of the array by 1 and then display it. It should then ask to confirm the changes or to undo and act accordingly.

### rotate()

**Input:** Array of Image, tempArray, previousArray

**Output:** none

**Functionality:**

It should rotate the image 90\* to the right. It should then display the image, ask the user to confirm the changes, and then act accordingly.