Design Document
Victor Dang
Image Processing

Data
Images - 2D char arrays of any size

Overview
The program will first display a menu of general options for the user. The user can either load an image, display it, edit an image, or exit the program. If they choose the edit option, it will display menu options the user can run the image through.Afterwards it will prompt the user to either save the newly modified image to a file name of their choosing or display the newly modified image to the screen. Afterwards it will go back to the start again.

Functions
CopyFileImage()
Input Parameters - 2D char array, int width, int height, input file pointer
Output - nothing
Functionality - the function will attempt to write/copy the contents of a given file onto a 2D char array in the main function

DisplayFileImage()
Input Parameters - 2D char array, int width, int height
Output - nothing
Functionality - the function will attempt to write the contents of a copied image onto the screen

DisplayGeneralMenuOptions()
Input Parameters - nothing
Output - nothing
Functionality - the function will display all the general options to the user such as loading, and displaying an image, editing the image, and exiting the program

DisplayEditMenuOptions()
Input Parameters - nothing
Output - nothing
Functionality - the function will display all the possible image modifications to a user's chosen image

GetMenuOptions()
Input Parameters - int input
Output - return the same integer input entered into the function
Functionality - the function will return back what was inputted into it when the user chooses a specific menu option

CropImage()
Input Parameters - original 2D char array, int width, int height, output 2D char array, int newWidth, int newHeight
Output - nothing
Functionality - the program will attempt to crop the 2D array image to custom new dimensions and save it to a new array

DimImage()
Input Parameters - original 2D char array, int width, int height, output 2D char array
Output - nothing
Functionality - the program will attempt to dim every pixel in a given 2D array image and save it to a new array

BrightenImage()
Input Parameters - original 2D char array, int width, int height, output 2D char array
Output - nothing
Functionality - the program will attempt to brighten every pixel in a given 2D array image and save it to a new array

SaveFileImage()
Input Parameters - 2D char array, int width, int height, output file pointer
Output - nothing
Functionality - the function will attempt to save a modified 2D char array image to a custom file name chosen by the user