

Data:

2D array (100x100) (that should be bigger than needed I hope)

Rotate, brighten, dim, crop, save, edit (all char)

Behavior:

Upon compiling the code, the user should be prompted to choose an option from the menu to load the image, display it, edit it, or exit the program. If the exit option is chosen then the menu will display more options: crop, dim, brighten, or rotate the image. The image will then be saved to a text file named what the user wants to name it. After completion, the code should loop back to the start.

Main Function Algorithm:

1. Display the main menu options.
2. Prompt the user for their option.
3. Based on the choice, call the corresponding function.
4. Repeat until the user exits.

Other:

1. load_image:

- Prompt the user for the file name.
- Attempt to read the contents of the image from the provided file.
- If successful, store the image data.
- If unsuccessful, display an error message.

2. display_image:

- Display the currently loaded image.

3. edit_image:

- Display the editing menu options.
- Prompt the user for their choice.
- Based on the choice, call the corresponding edit function.

4. crop_image:

- Prompt the user for the coordinates of the smaller section of the original image they want to use.
- Create a new image using the specified section of the original image.

5. dim_image:

- Dim each pixel of the image by reducing its brightness.

6. brighten_image:

- Brighten each pixel of the image by increasing its brightness.

7. rotate_image:

- Create a new image by rotating every pixel in the original image to a new location.

8. save_image:

- Prompt the user if they want to save the edited image.
- If yes, prompt for a file name and save the edited image to the specified file.