Erinstagram!

Image functions requirements:

Image editing functions. A menu with 4 options is provided at the start of the program which asks the user to “load a new image”, “display the current image”, “edit the current image”, or “exit the program”. If the user asks to load the image, the program should attempt to read the contents of any “size” from a file they provide. If the user asks to edit the image, the user should be asked to choose an option from another menu and that should do the following: crop, dim, brighten, dim, and rotate 90 degrees (extra credit). After editing, the new edited image should be saved in the file then the user should be returned to the original menu and be asked the same questions and if the user asks to load the image, he should be provided with the edited image.

Functions:

main():

Data: Array size for the image, check for the choice selected and complete the program by finishing those choices.

Functionality: Start by providing a menu of four choices and show the image from the file if the user asks or edit the image that is stored in the file and after editing, save it in the file and the user should be brought back to the original menu.

loadImage():

Input Parameters: File pointer, int rows, int columns, int image 2D array

Returned Output: Nothing

Functionality: Load the image from the file into image 2D array

displayImage():

Input Parameters: int rows, int columns, int image 2D array

Returned Output: Nothing

Functionality: Iterates through all of the pixels one by one and after displaying all the pixels in one row, the function moves to the next row

cropImage():

Input Parameters: int image 2D array, int rowLocations, int colLocations

Returned Output: Cropped image

Functionality: Crops the image from the selected row and column locations

dimImage():

Input Parameters: int image 2D array, int rows, int columns

Returned Output: Dimmer image

Functionality: Creates an image of the stored image in the file by each pixel one step dimmer

brightenImage():

Input Parameters: int image 2D array, int rows, int columns

Returned Output: Brighten image

Functionality: Creates an image of the stored image in the file by each pixel one step brighter

rotateImage():

Input Parameters: int image 2D array, int pointer rows, int pointer columns

Returned Output: 90 degrees rotated image

Functionality: Moves all of the pixels in new locations eventually creating a rotation effect

saveImage():

Input Parameters: int image 2D array, int rows, int columns, char pointer filename

Returned Output: Nothing

Functionality: Saves the edited image into the file by replacing the old one