Goal:

Manipulation of BMP image files:
(1) Mirror an image horizontally (left and right).
(2) Mirror an image vertically (up and down).

Objective: Developing experience with arrays, pointers and recursion in C.

Background: A ***mirror image*** is a reflected duplication of an object that appears identical but reversed. As an optical effect it results from reflection off of substances such as a mirror or water.

Download: Download and unpack file lab6.zip from Camino. It contains the same pre-compiled library file (libbmp3.a) and include file (bmp3.h) that was used for lab 5, but a different partially completed main program (main6.c).

Assignment: Complete the source code for each the following three functions that are located within the provided main program (main6.c):

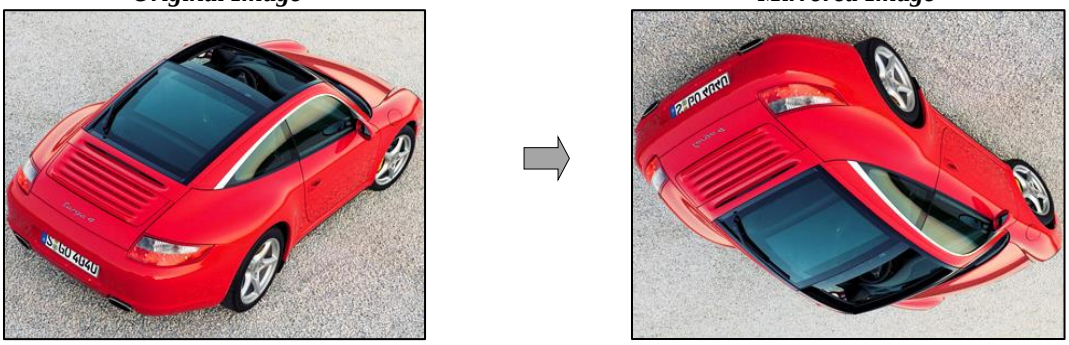
```
void MirrorRows(IMAGE *image, unsigned min_row, unsigned max_row) ;
```

Recursively reverses the rows of an image.

Note: Simply reverses the order of the *pxlrow* pointers.

When done correctly, the result should look similar to the example below:

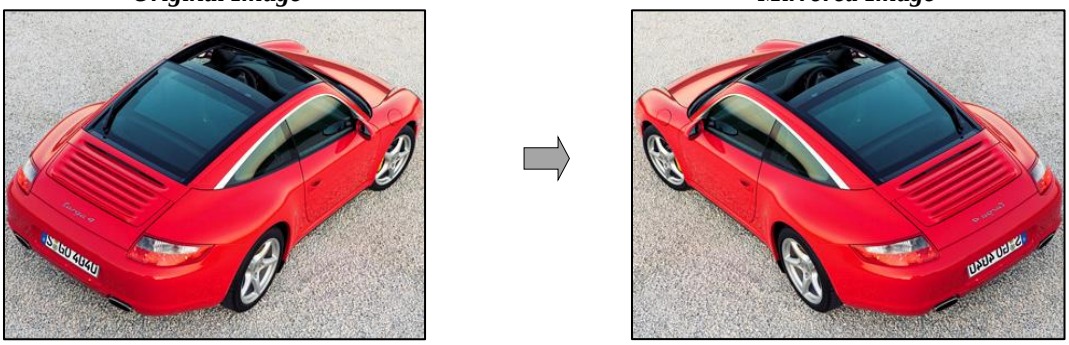
Original Image ***Mirrored Image***



`void` **`MirrorCols`**`(IMAGE *`*`image`*`, unsigned` *`row`*`,` `unsigned` *`min_col`*`, unsigned` *`max_col`*`) ;`
Recursively reverses pixels in every row of the image.

When done correctly, the result should look similar to the example below:

Original Image ***Mirrored Image***



Compilation: Compile and link your program using the following command line:

gcc –o lab6 main6.c -L. -lbmp3

Execution: Execute your program using the following command syntax:

./lab6 *src-file* *dst-file* *{option#}*

When Done: Demonstrate proper operation of your program to the teaching assistant and upload the completed source code for file main6.c to the lab drop box on Camino. Do not upload any other files.