SUMMARY

In this lab you will add two methods to the Picture class (Picture.java) to manipulate images by swapping the red, green, and blue values.

IN-LAB

PART I

Create a new method swapRGB() in the file Picture.java. This method will modify an image by swapping the red, green, and blue values in each pixel in a specific order. More specifically, the color values will be swapped as follows:

- The old green value will become the new red value
- The old blue value will become the new green value
- The old red value will become the new blue value

Obviously this method will require you to use an array of pixels and a loop. Refer to similar methods from the lectures for help.
PART II

For the second part you will create another method: `swapRGB(int numSwaps)`

You will notice this method has the same name as part 1, but contains an integer parameter called `numSwaps`. This method should perform the RGB swap described in part 1 multiple times as determined by the value of the parameter. For example, if you call `swapRGB(2)` the method should perform the swap twice. If you call `swapRGB(1)` the behavior will be the same as the original method. What happens if you call `swapRGB(3)`?

Hint: You should realize that you’ve already done most of the work in part 1. In part 2 you don’t need to repeat your efforts, just take advantage of the work you’ve done in part 1.

Example: `caterpillar.jpg`

<table>
<thead>
<tr>
<th>Original</th>
<th>swapRGB(1)</th>
<th>swapRGB(2)</th>
</tr>
</thead>
</table>

GET CREDIT

Don’t forget to show a coach what you’ve done before you leave so you get credit for attending and participating in the lab.

POST-LAB

Try your method on other images. Remember, testing on different inputs is an important part of ensuring your code works.