

## Lab Five: Arrays and Loops

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**Due Date: Feb 27, 2015**

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### Objective

The objective of this lab is to

- Practice reading code,
  - Practice adding to a pre-written class
  - Writing methods
  - Writing different loops and
  - Testing your code.
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### Exercises

- Save the Netbeans project lab5.zip
- Open it up in Netbeans.
- Open Picture.java under the media folder in lab5.
- You will see in this code three methods written for you – increaseRed() and decreaseRed() with an arbitrary changes in picture colour (by 2) and changeRed(double percentage) that changes red based on a percentage.
- You are to do the following in Picture.java:
  1. Write increaseGreen(), decreaseGreen() and changeGreen(double percentage) using a while loop
  2. Write increaseBlue(), decreaseBlue() and changeBlue(double percentage) using a for loop
  3. Write a method changeColours(double r, double g, double b) where the three parameters indicating percentage change for red, green and blue. Your method should allow these values to be positive (indicating that that color should be increased) or negative (indicating that that color should be decreased). Specifically, percentage change will be a number between -1 (100% reduction) and +1 (100 increase). Your changeColors() method should be written using a *foreach* loop.
- Write code to test ALL your methods.

### Hints

- Below is what the picture should resemble when the main is run the first time (Since we do not all have the same graphics cards there will be variations)
- -1 is equivalent to a 100% reduction, -.5 is a 50% reduction and so on.
- Testing code goes in the main method in Lab5.java.

### Submit:

Zip your entire Netbeans project and upload it to the drop box or submit the Picture.java file

### Example Output before and after first run of Lab5.java



### NOTE:

It is VERY important you stop each execution after you test your code. There is a media issue with the current implementation of the media files – if we have time, we will resolve this problem. In the output window hit the red square on the left.

