CS 1316 – Homework 2 – Mirror Image

Due: Friday September 4th, 2009 before 6pm.

Out of 100 points

This is an individual assignment. You may collaborate with other students in the class but your solutions must be your own. Collaboration means talking through problems, assisting with debugging, explaining a concept, etc. You should not exchange code or write code for others. Collaboration at a reasonable level will not result in substantially similar code.

Your assignment:

You want to mimic the effect of an image sitting on a black glossy tabletop. The image will be bright but the reflection will be dimmer. Create a class called MirrorImage that has a static "main" method, and a single static mirror(Picture) method that returns a picture. Your main method should ask the user to select an image, and then use the mirror() method to produce a mirrored version of the user selected image and show it to the user.

Example Input:	Example Output:

Grading Rubric:

File named MirrorImage.java, includes names/email/collaboration statements   10 pts

main method:
- asks user for an image   10 pts
- runs mirror() on that image   10 pts
- and shows the result   10 pts

mirror method:
- Creates & returns an image twice as high as the original   10 pts
- Copies the original to the top of the output image   10 pts
- Vertically mirrors (flips) original image into bottom half   20 pts
- Darkens the "reflected" image   20 pts

Total Possible: 100 pts

Possible Extra Credit:
    Creates a "wavy" water effect: 10 pts

Misc penalties:
    Does Not Compile: -100 pts
    Violates CS 1316 coding guidelines: -1 pt (each)