In this lab, you will be performing image manipulations using linear algebra. Remember, without geometry, life is pointless.

To complete this assignment, please carefully follow the following instructions:

- 1. Download the detailed instructions for this assignment, geometry_lab.pdf
- 2. Download the stencil, geometry_lab.py, for this assignment, and move it into your matrix folder.
- 3. You do not need to submit anything marked ungraded.
- 4. Support code and data resources can be found at the Coding the Matrix Resources page. Here, you will find image_mat_util.py and png.py.
- 5. For each problem/task,
 - 1. Test out your solution in the Python REPL;
 - 2. Copy your solution into the stencil file geometry_lab.py;
 - 3. Submit your solution by opening a console window, navigating using cd to the matrix folder, and entering the command python3 coursera_submit geometry_lab.py. The script will ask for your username and password. They are located on the assignments page.

You can use the submit command to submit solutions for as many tasks as you like at one time.

Have fun!

