

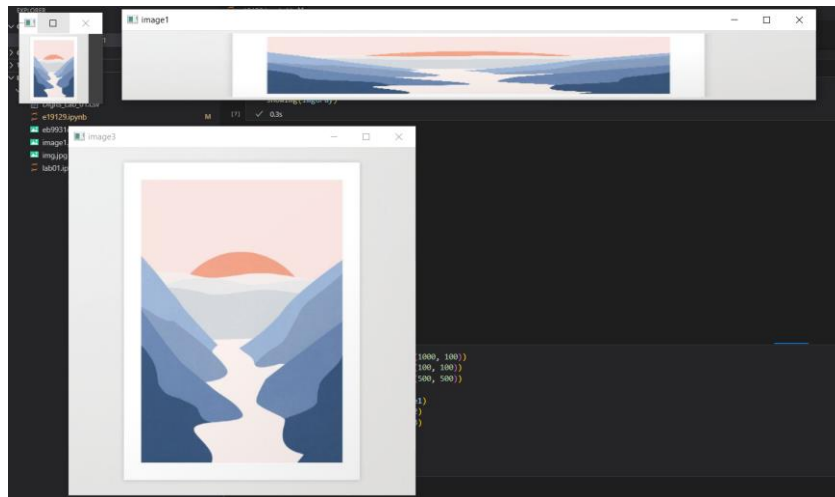
E/19/129

K.H. Gunawardana

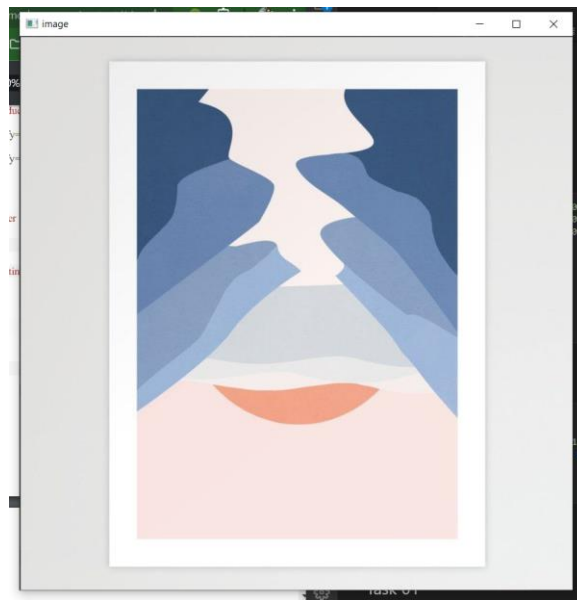
CO543 – Image Processing – Lab 1

Implement basic image processing functions using Python-OpenCV

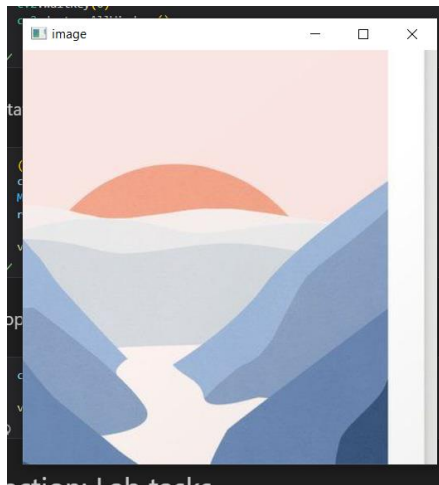
- Resizing



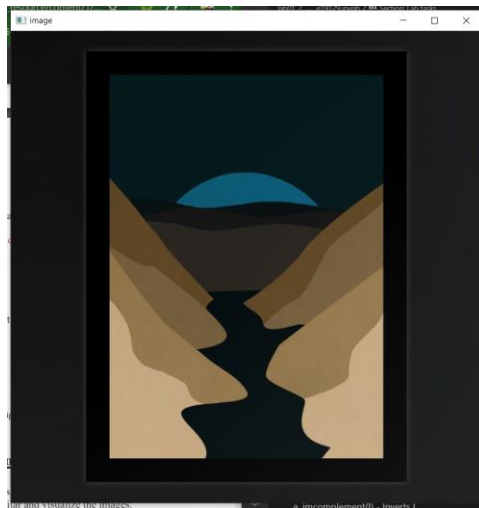
- Rotation



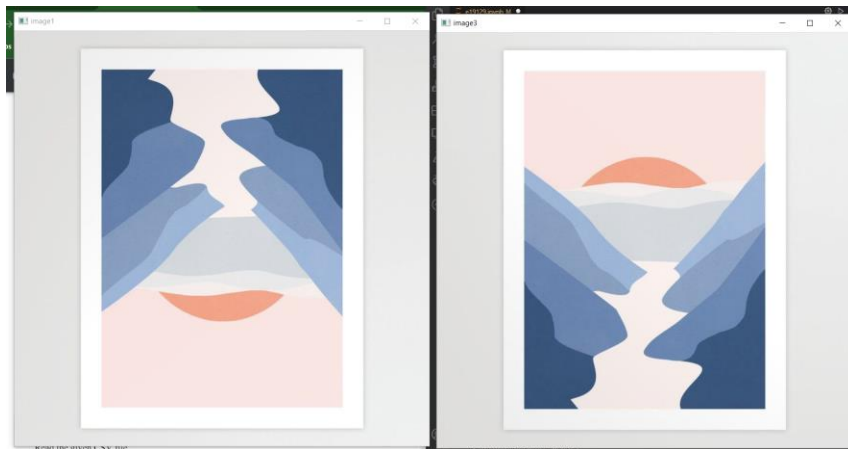
- Cropping



- Complementing



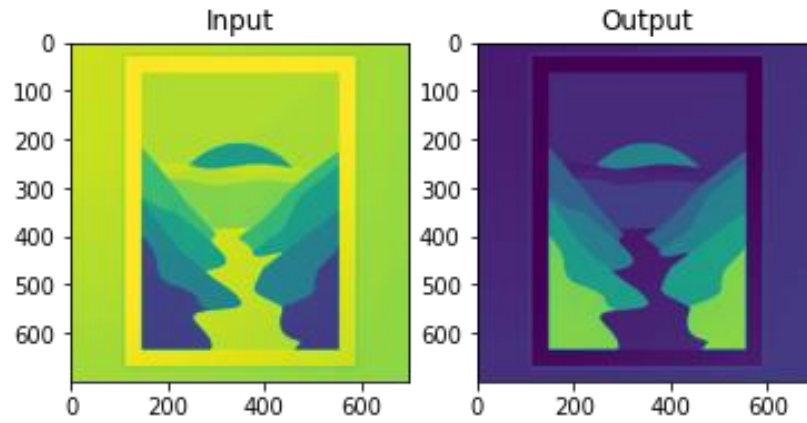
- Flipping an image



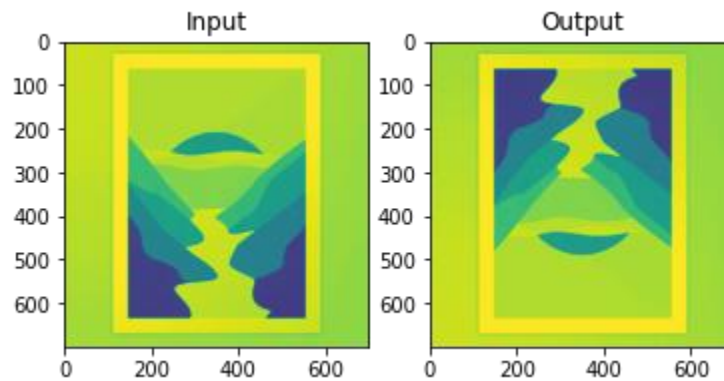
Task 01

Implement the following functions on your own using PythonOpenCV.

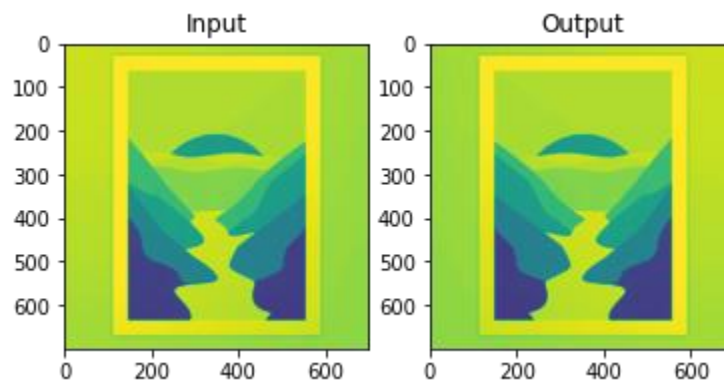
1. `imcomplement(I)` - Inverts `I`



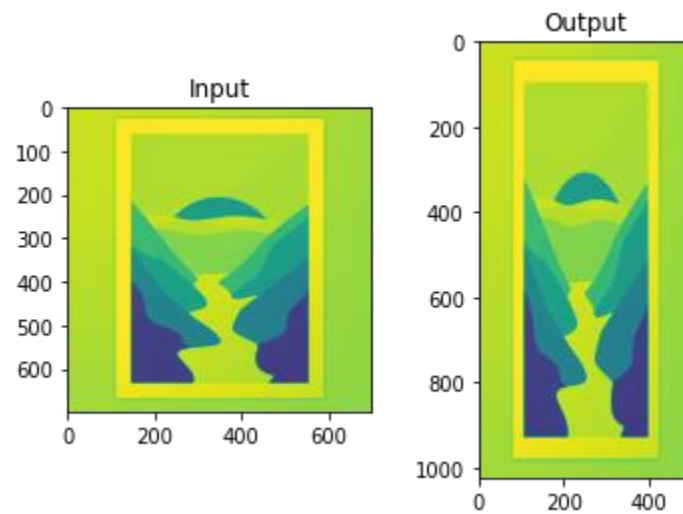
2. `flipud(I)` - Flips image along x-axis



3. `fliplr(I)` - Flips image along y-axis



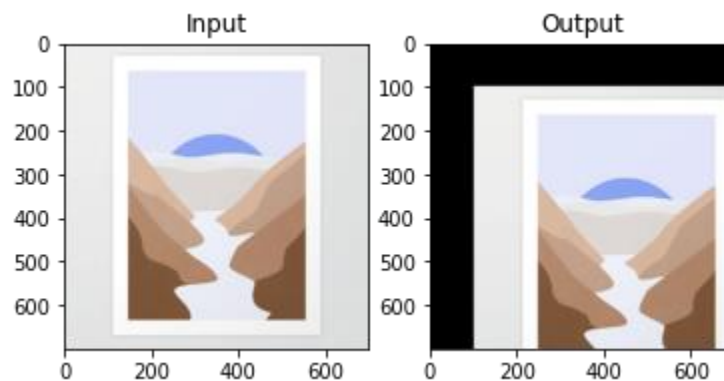
4. `imresize(I,[x y])` with nearest-neighbour interpolation



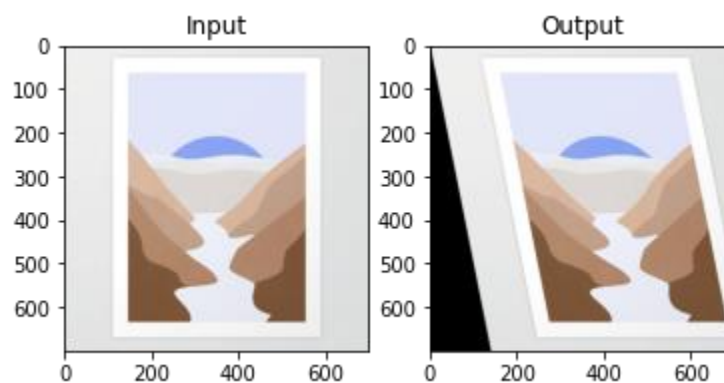
Task 02

Implement the 4 geometric transformation functions using OpenCV in addition to the given example.

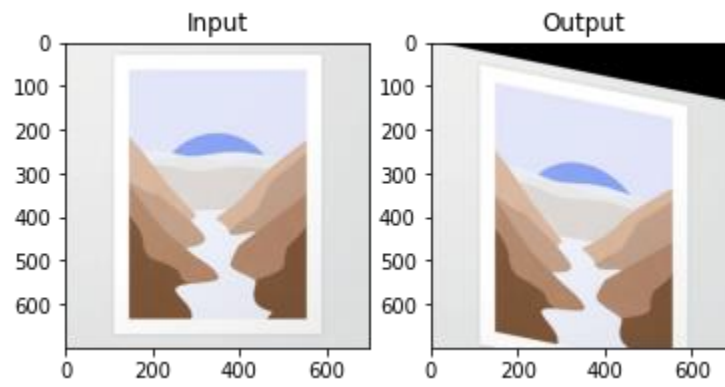
- Translation



- Shearing - Horizontal



- Shearing – Vertical



- Scaling

