

# INT3404E 20 - Image Processing: Homeworks 1

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## 1 Goals

- Learn the basic python and common library for image processing like OpenCV, Numpy, Matplotlib.
- Get used to Google Colab environment.
- Document your code and write a report with Latex.
- Version control with Git.

## 2 Prequisites

Read python tutorial, Numpy, Matplotlib documentation.

## 3 Exercises

### 3.1 Basic python

My submission for all the exercises are on UET courses.

### 3.2 Google Colab

I have done this exercise and pushed to Github

### 3.3 OpenCV, Numpy, Matplotlib

The result of the functions flip image, rotate image, grayscale image are shown below.



Figure 1: Original Image.



Figure 2: Grayscale Image.



Figure 3: Rotated Grayscale Image.