

Assignment #1 (LO 1)

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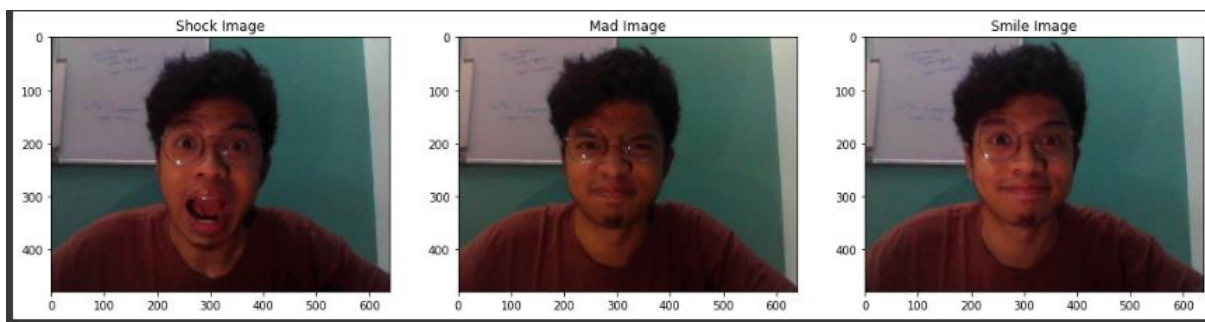
QUESTION 1

List of libraries used:

- IPython.display import display, Javascript
- google.colab.output import eval_js
- base64 import b64decode
- cv2
- numpy as np
- matplotlib.pyplot as plt
- fPIL import Image
- fIPython.display import Image
- %matplotlib inline

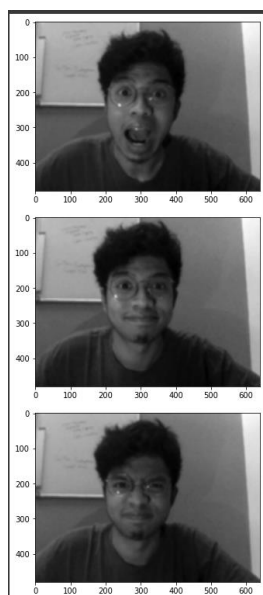
1. Facial Expressions Images

- Using webcam to capture 3 images with 3 different expressions.

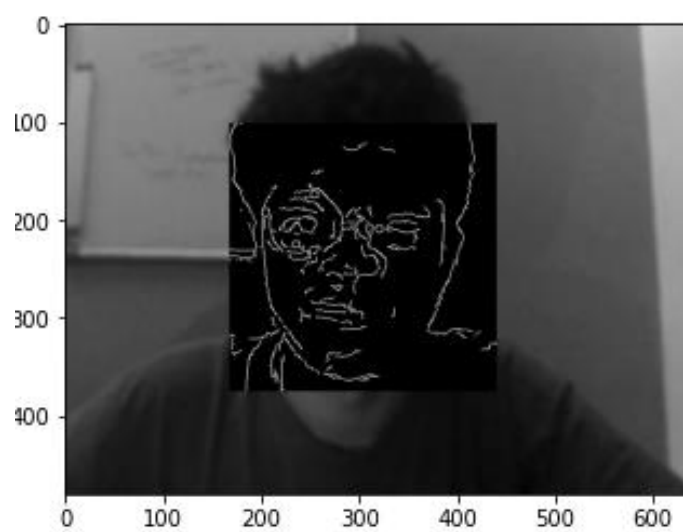
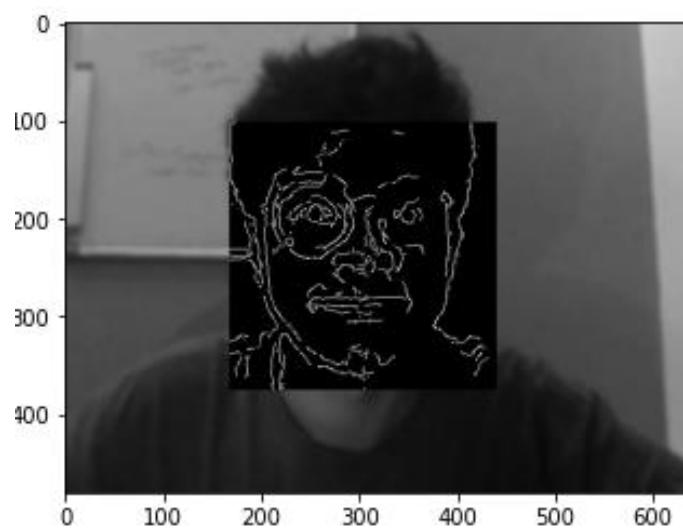
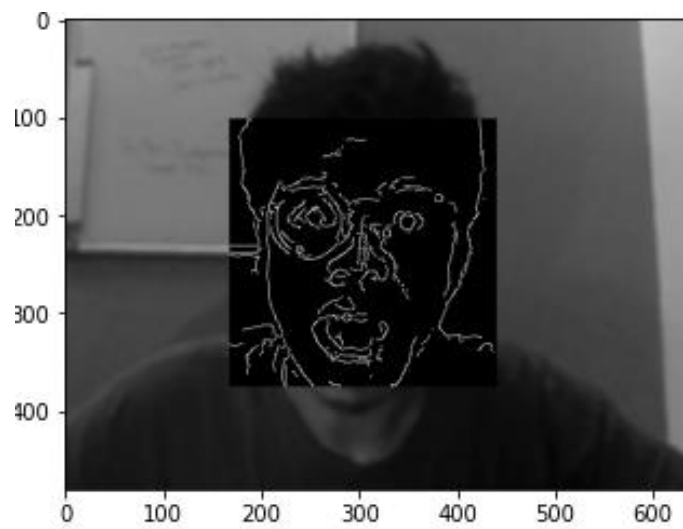


2. Image Processing

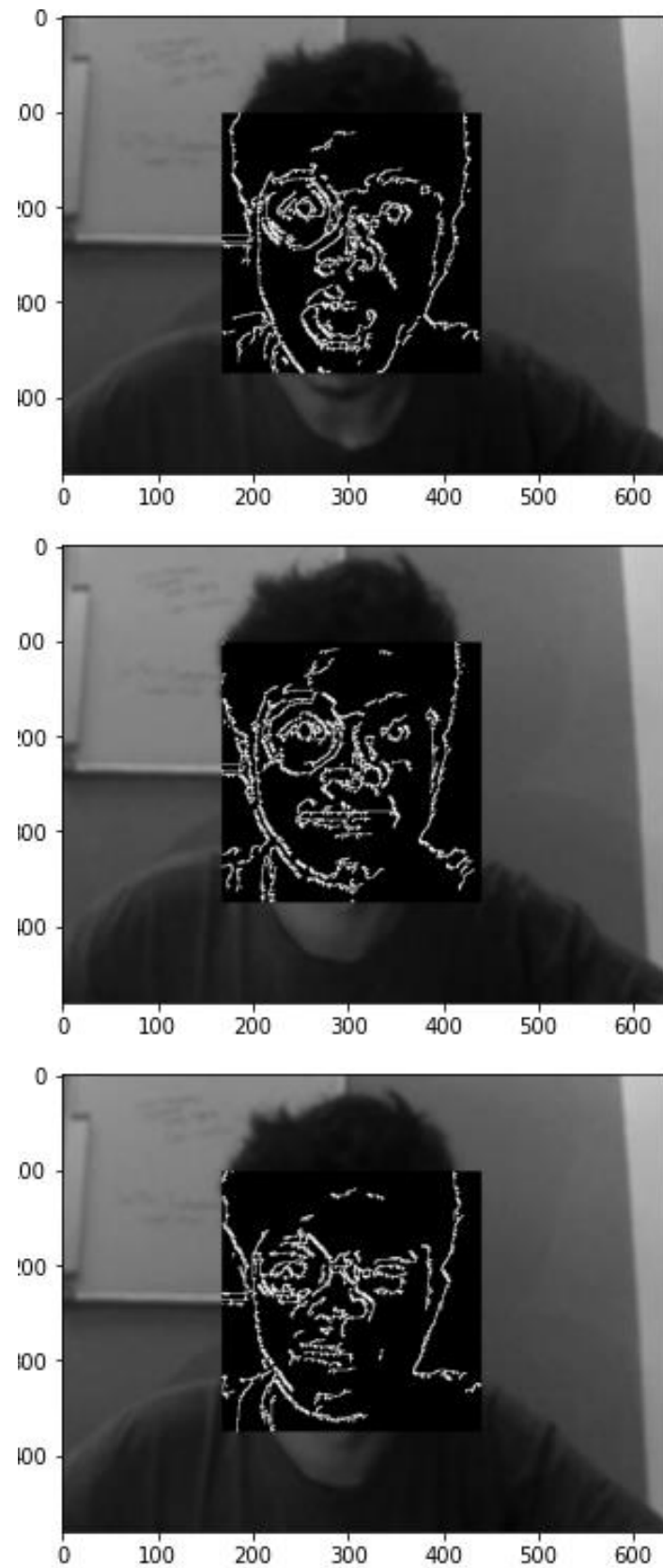
- Change to gray image



3. Edge Filtering
a. Canny Edge Detection



b. Sobel Edge Detection



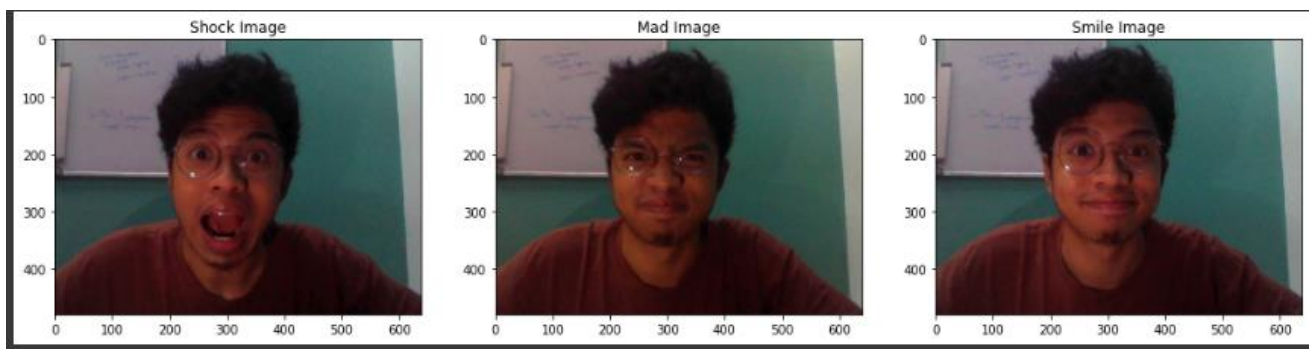
4. Link to source code

QUESTION 2

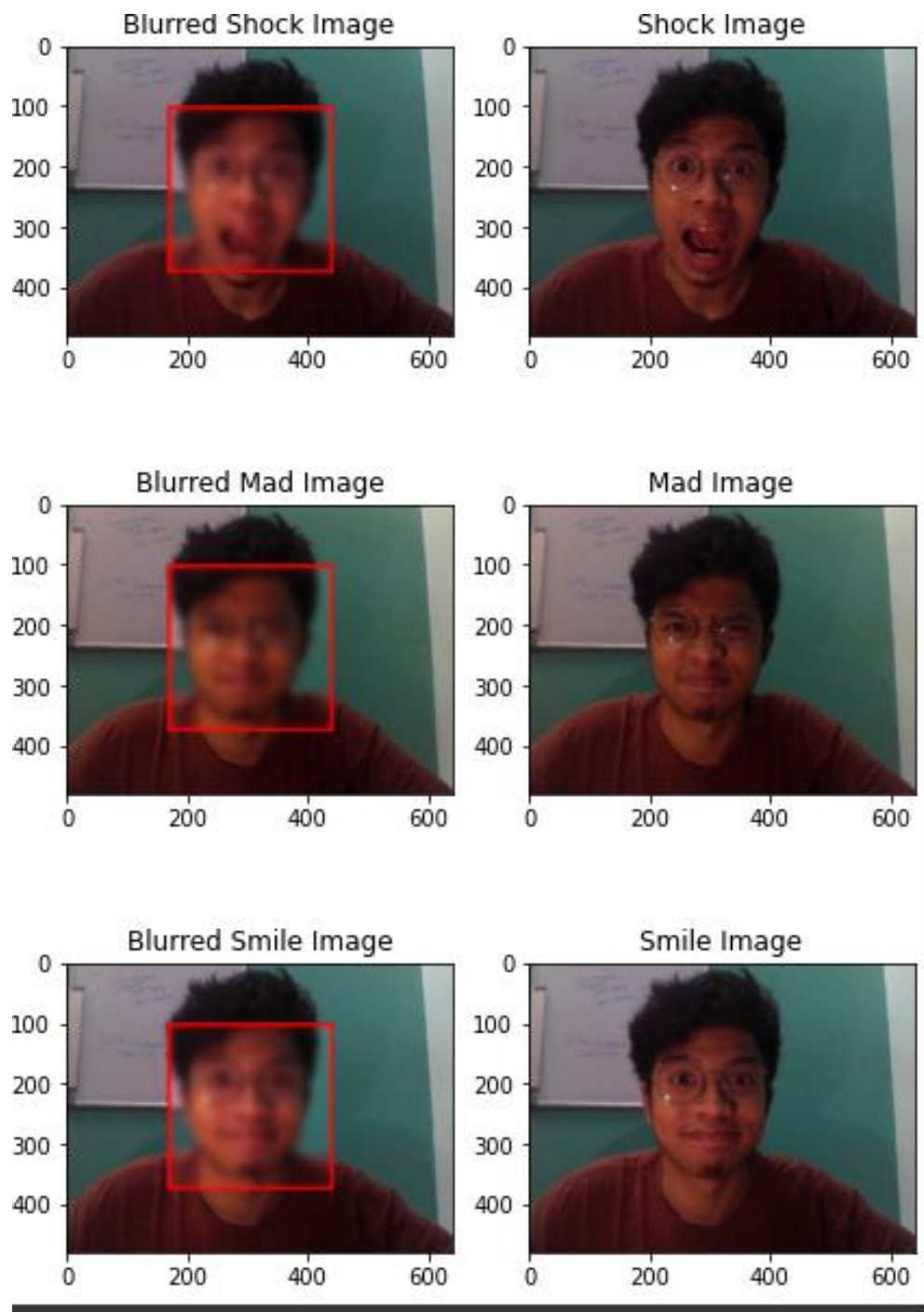
List of libraries used

- IPython.display import display, Javascript
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- fPIL import Image
- fIPython.display import Image
- %matplotlib inline

1. Import three pictures with three different expressions



2. Detect faces and apply Gaussian Blur

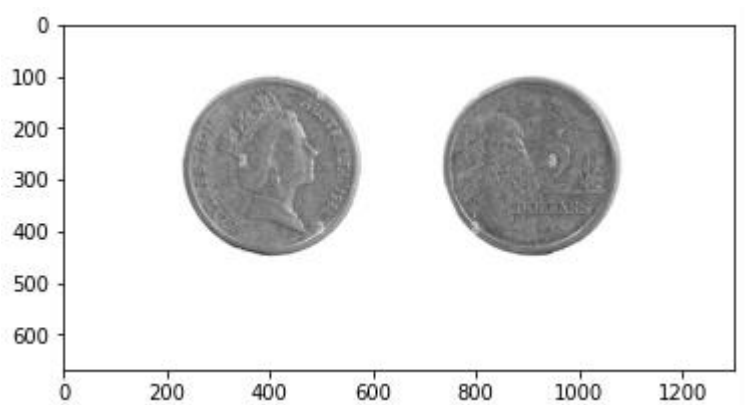


QUESTION 3

List of libraries used

- import cv2
- import numpy as np
- import matplotlib.pyplot as plt
- from PIL import Image
- from IPython.display import Image
- %matplotlib inline

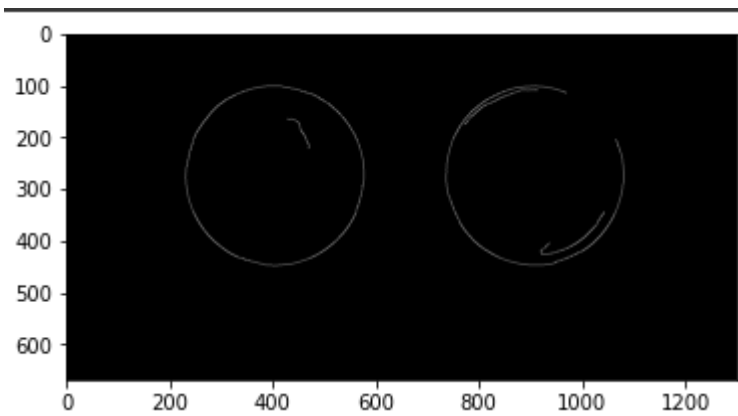
1. Import image of coin



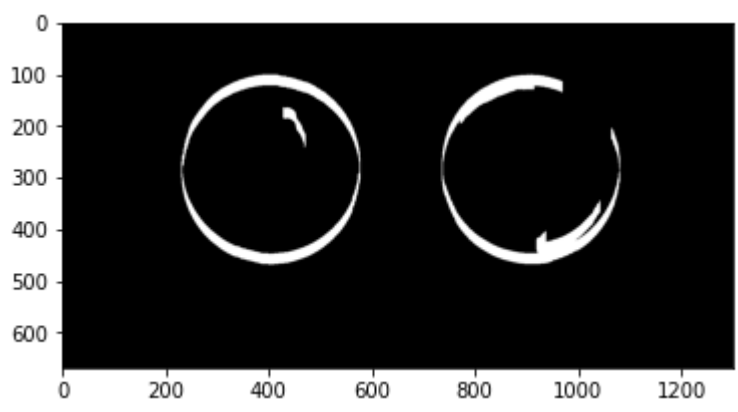
2. Image Processing



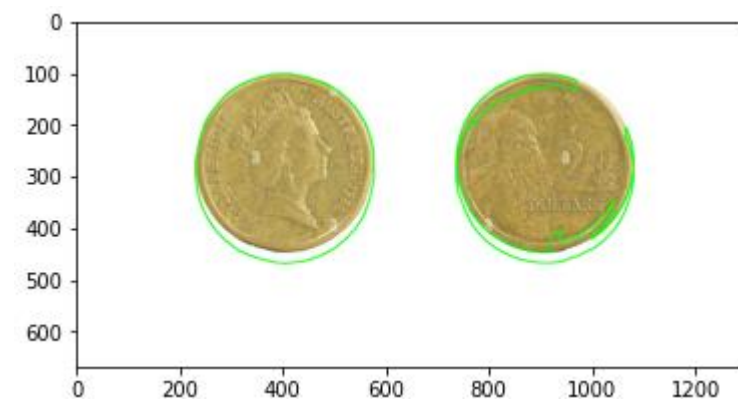
3. Edge Filtering



4. Dilation



5. Apply Contour



```
] print(len(countour))
```

```
2
```