

SIMPLE IMAGE OPERATIONS

WEEK 3



Arranged By:

Rajendra Rakha Arya Prabaswara

(1941720080/21)

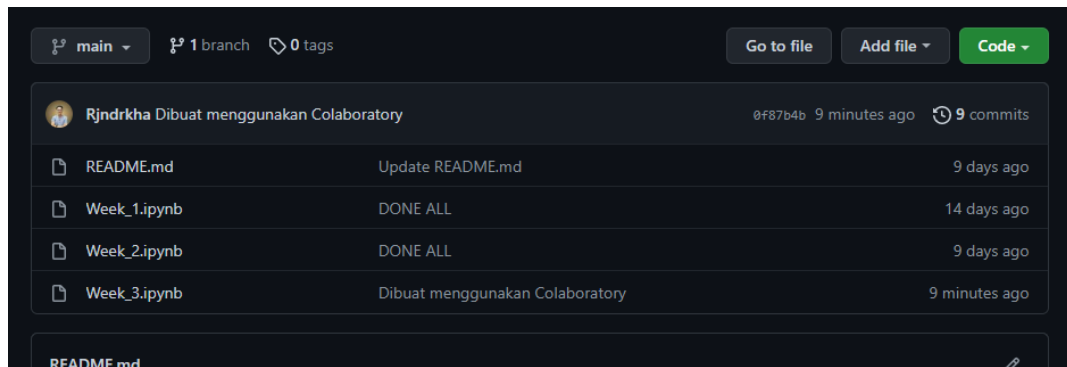
PROGRAM STUDI D-IV TEKNIK INFORMATIKA

JURUSAN TEKNOLOGI INFORMASI

POLITEKNIK NEGERI MALANG

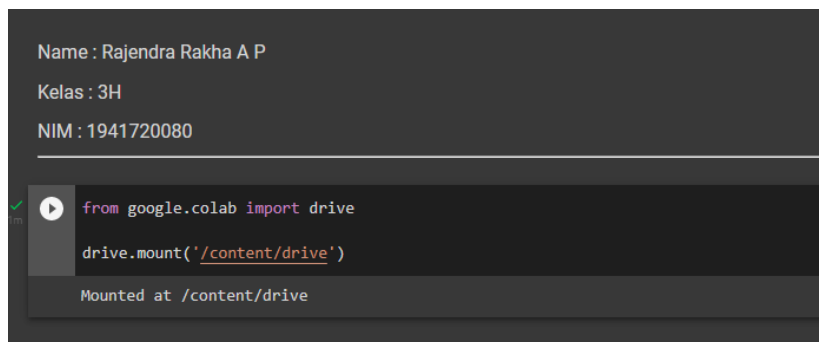


1. Create New Google Collab & Save To github

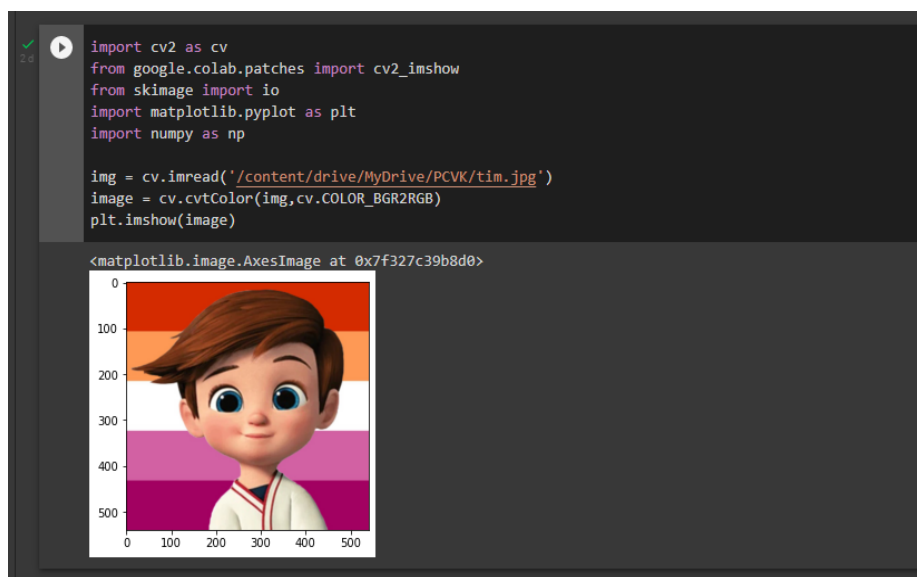


https://github.com/Rjndrkha/PCVK_Genap_2022

2. Access Image Folder on Google Drive

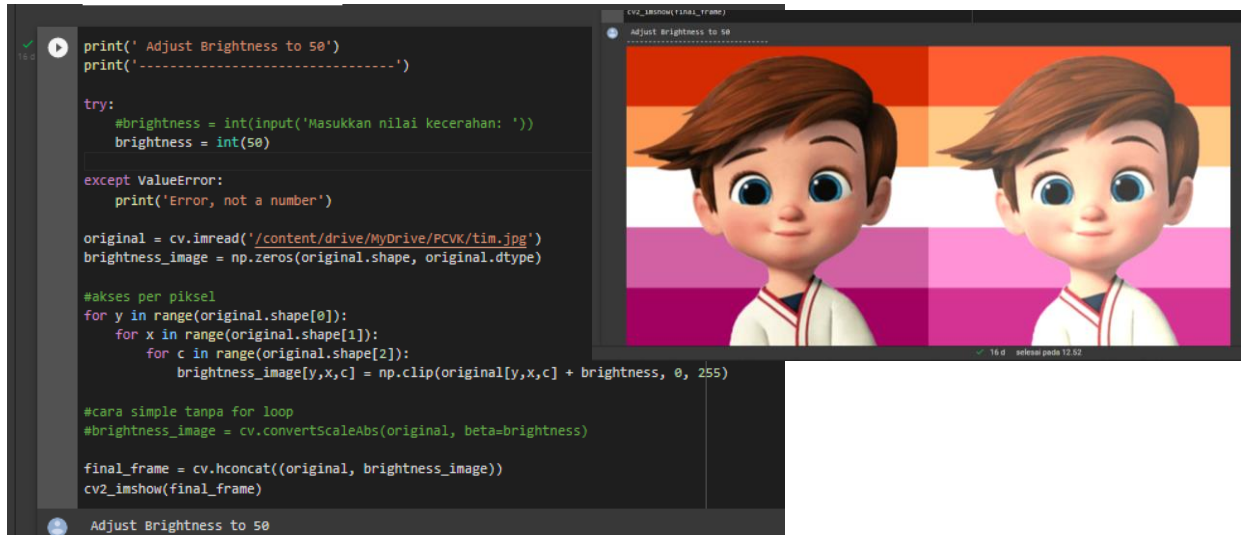


3. Display Image from Drive



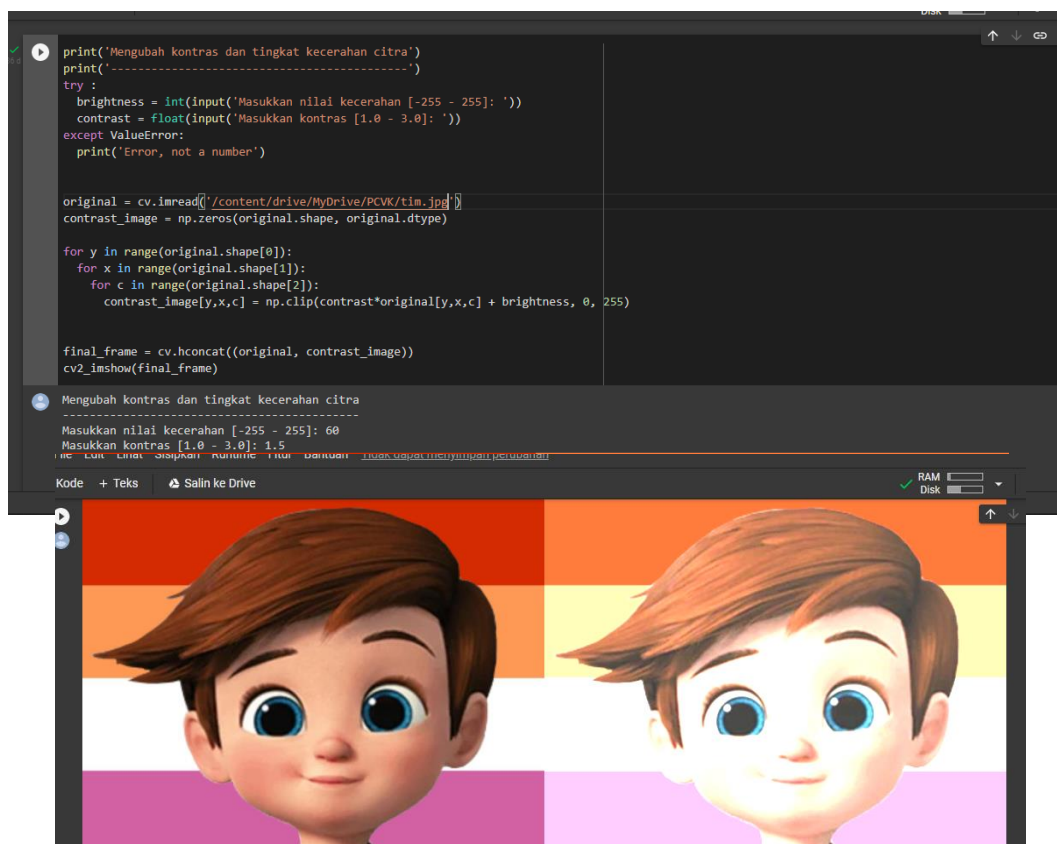


4. Adjust Image Brightness level to 50



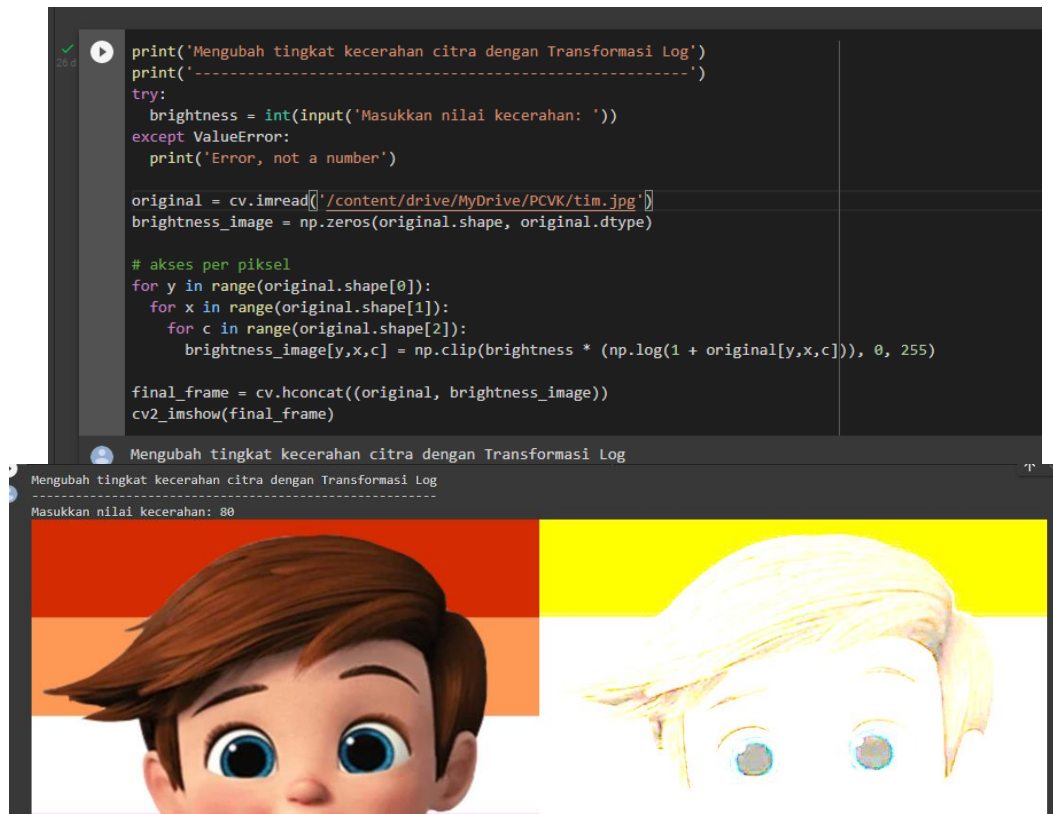
TASK

1. Contrast Image Transformation result





2. Log Transformation



3. Displaying Image



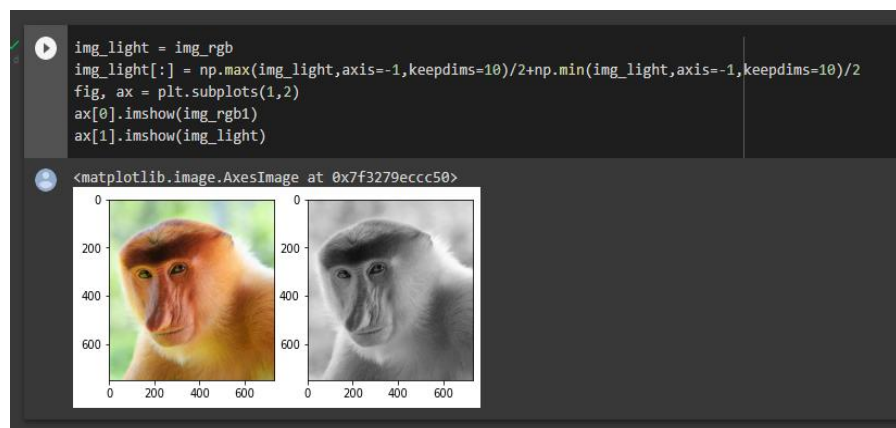


4. Grayscale Image Averaging method

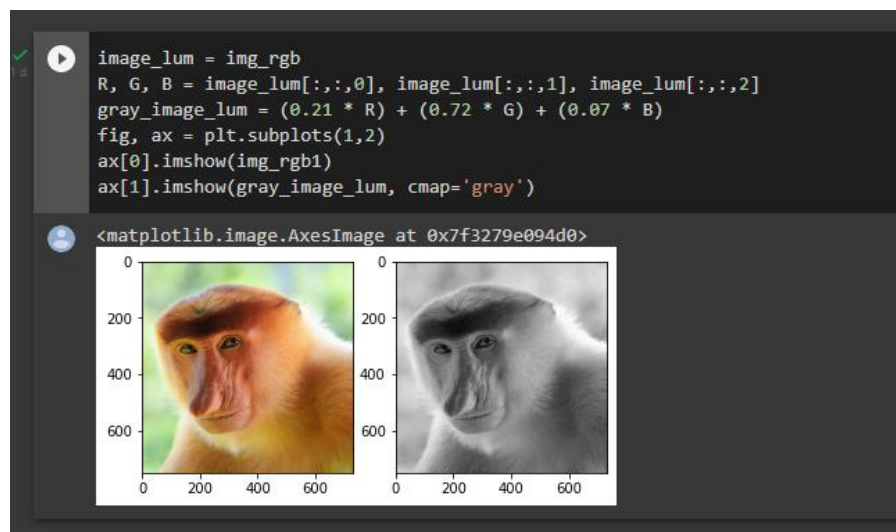
A. Averaging



B. Lightness



C. Luminance





D. Image Transform With Custom color selection

```
img_4 = cv.imread('/content/drive/MyDrive/PCVK/mandrill.png')
ret, mask = cv.threshold(img_4[:, :, 2], 180, 255, cv.THRESH_BINARY)

mask3 = np.zeros_like(img_4)
mask3[:, :, 0] = mask
mask3[:, :, 1] = mask
mask3[:, :, 2] = mask

red = cv.bitwise_and(img_rgb, mask3)

gray = cv.cvtColor(img_4, cv.COLOR_BGR2GRAY)
img_4 = cv.cvtColor(gray, cv.COLOR_GRAY2BGR)

gray = cv.bitwise_and(img_4, 255 - mask3)

out = gray + red

fig, ax = plt.subplots(1, 2)
ax[0].imshow(img_rgb)
ax[1].imshow(out, cmap='gray')
```

<matplotlib.image.AxesImage at 0x7f3279b2ced0>