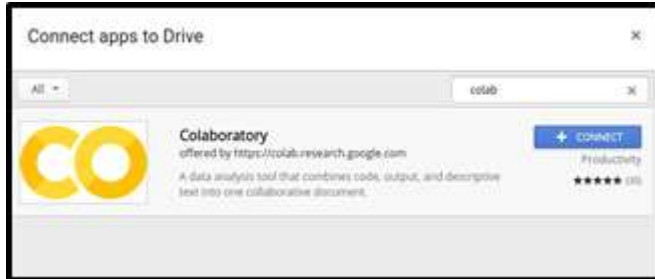


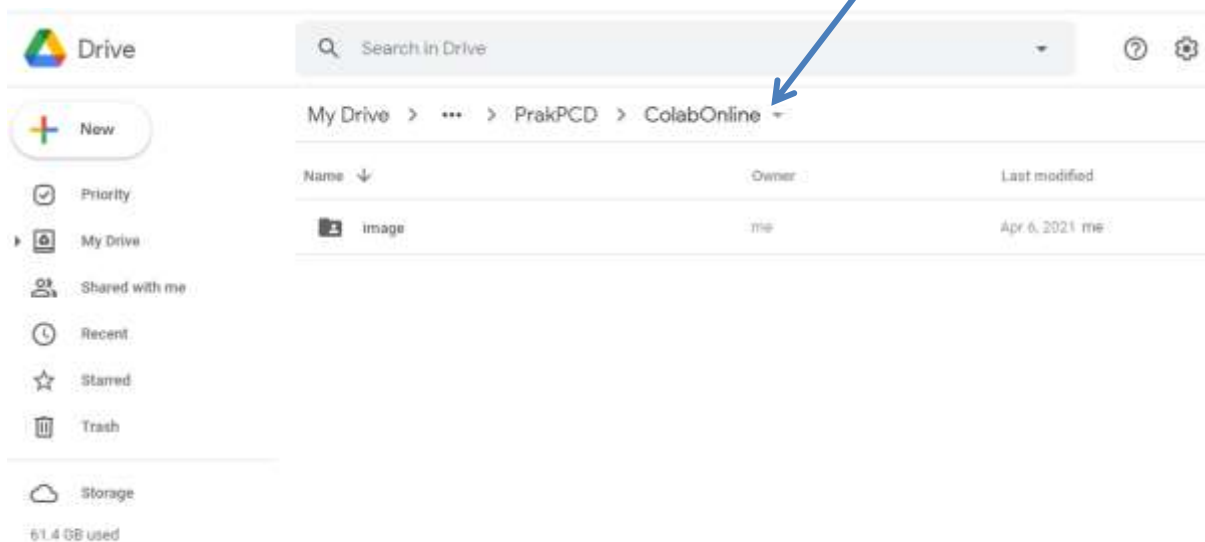
PERTEMUAN 1. PENGENALAN GOOGLE COLAB UNTUK PENGOLAHAN CITRA

BAGIAN 1. Menggunakan Colab

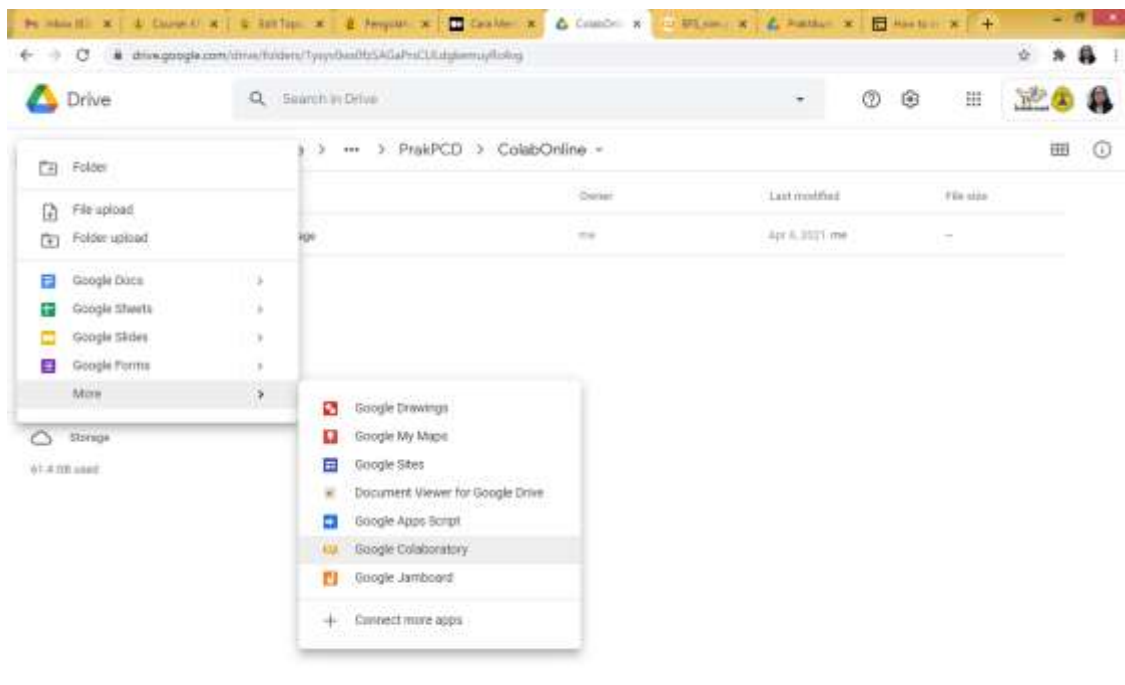
1. Install colab
2. Masuk kedalam google drive kemudian dipojok kiri atas klik New > More > Connect more apps. Lalu pada kolom search ketikkan “colab” setelah muncul klik connect.
- 3.



4. Buat folder project di Drive



5. Kemudian masuk kedalam folder tersebut. Kemudian klik kanan > More > Collaboratory.



5. Ketikkan kode berikut di sini



BAGIAN 2.

Silakan Saudara ikuti instruksi untuk mengetikkan kode seperti di bawah ini.

1. Import library dan membaca file melalui import files, google drive dan

```
1 import matplotlib.pyplot as plt
2 import numpy as np
3 import cv2
4 from skimage import data, color
5 from skimage.transform import rescale, resize, downscale_local_mean
```

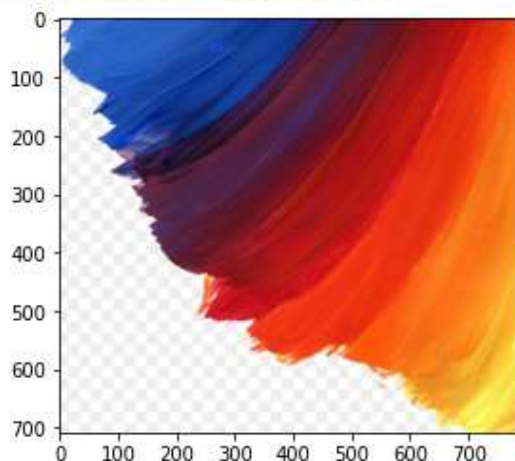
```
[13] 1 from google.colab import files
      2 uploaded = files.upload()
```

Choose Files painting.PNG

- **painting.PNG**(image/png) - 775894 bytes, last modified: 4/6/2021 - 100% done
Saving painting.PNG to painting.PNG

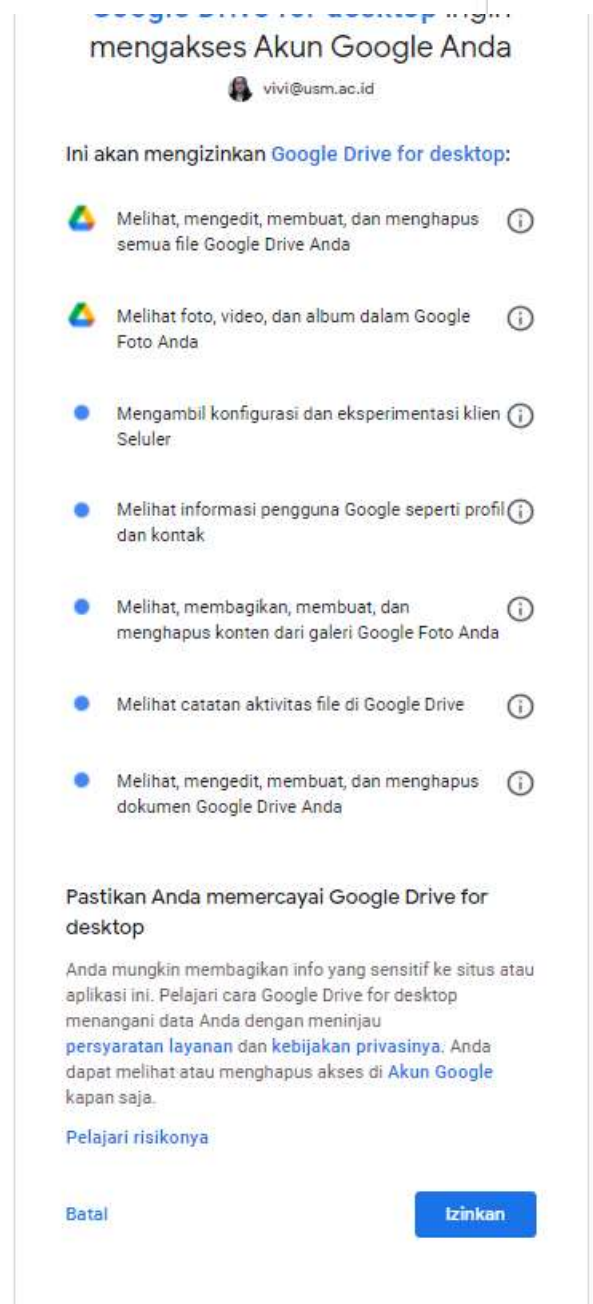
```
[33] 1 img=plt.imread("painting.PNG")
      2 print(img.shape)
      3 print("Banyak pixel = %i pixels" % (img.shape[0] * img.shape[1]))
      4 plt.imshow(img);
```

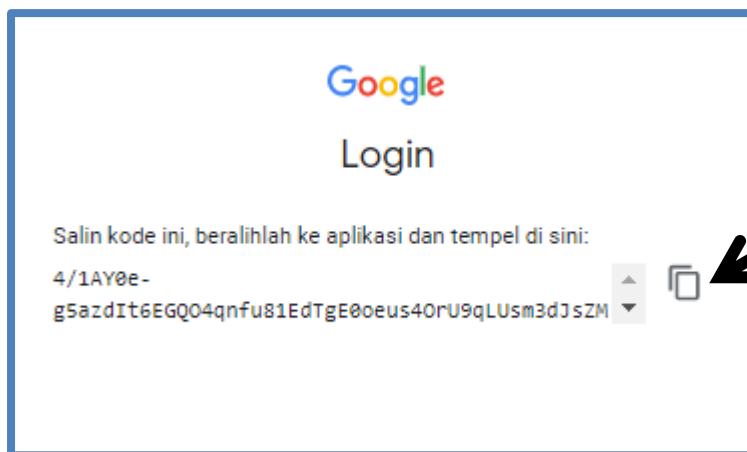
(708, 791, 4)
Banyak pixel = 560028 pixels





Klik URL
Pilih Akun di Google,
klik izinkan





Klik Salin Kode

```
1 from google.colab import drive  
2 drive.mount("/content/gdrive")
```

Go to this URL in a browser: <https://accounts.google.com/ServiceLogin>

Enter your authorization code:

4/1AY0e-g5azdIt6EGQ04qn

Paste-kan di sini

```
1 from google.colab import drive  
2 drive.mount("/content/gdrive")
```

Mounted at /content/gdrive

image_processing.ipynb
File Edit View Insert Runtime Tools Help Cannot save changes

Files

- Digital Forensik
- Foto Winisuda 2019
- Kuliah
 - Praktikum
 - Prak Basis Data
 - Prak Dasar Kom...
 - Prak Data Mining
 - Prak Desain Gra...
 - Prak Fuzzy
 - Prak IMK
 - Prak RPL
 - Prak Simulasi G...
 - PrakKecerdasan...
 - PrakMobile
 - PrakPBO
 - PrakPCD
 - Antcolony-ed...
 - ColabOnline
 - image
 - paintin...
 - pantal...
 - Image-Edge-D...
 - Materi Prakti...
 - Matlab
 - Script
 - Skrip

Upload
New file
New folder
Rename folder
Delete folder
Copy path
Refresh

Because the image is now a NumPy array, we can easily perform some operations:

```
[37] 1 from google.colab import drive
      2 drive.mount("/content/gdrive")

Mounted at /content/gdrive
```

```
1 img2=plt.imread("/content/gdrive/MyDrive/USM/Kuliah/Praktikum/PrakPCD/ColabOnline/image/pantal.JPG")
2 print(img2.shape)
3 print("Banyak pixel = %i pixels" % (img2.shape[0] * img2.shape[1]))
4 plt.imshow(img2);
```

9875 pixels

1s completed at 12:12 PM

Klik Files

Cari tempat
folder
image di
drive
Saudara

Hasil copy → paste kan ke bagian plt.imread(".. pastekan path nya di sini...")

```
1 image = color.rgb2gray(data.astronaut())
2 plt.imshow(image)
```

<matplotlib.image.AxesImage at 0x7f7c34270290>

