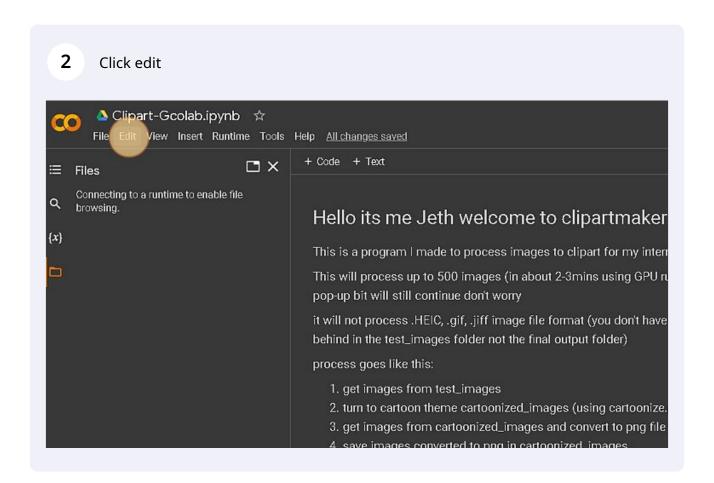
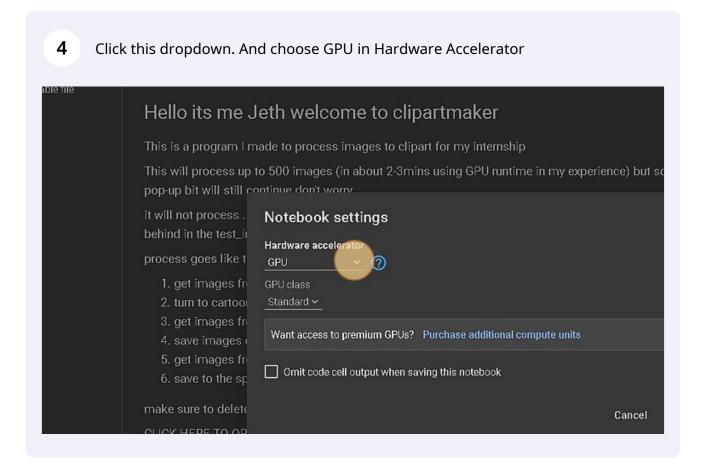


# How to Cartoonize Images Using Google Colab

Navigate to where you uploaded the ClipArt folder in your Google drive and open Clipart-Gcolab.ipynb

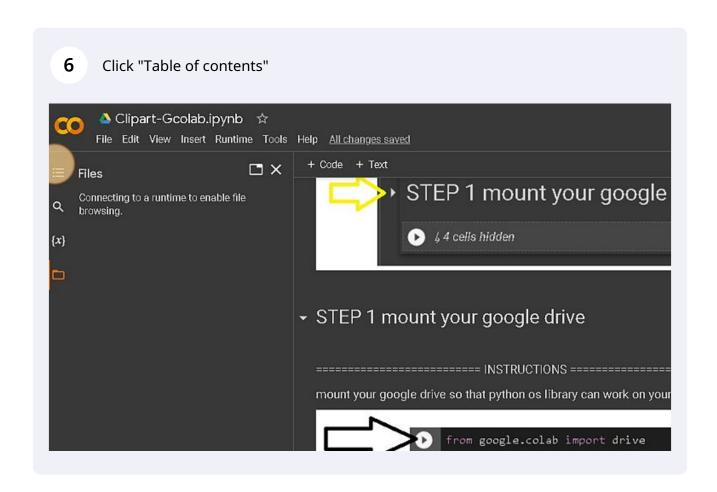


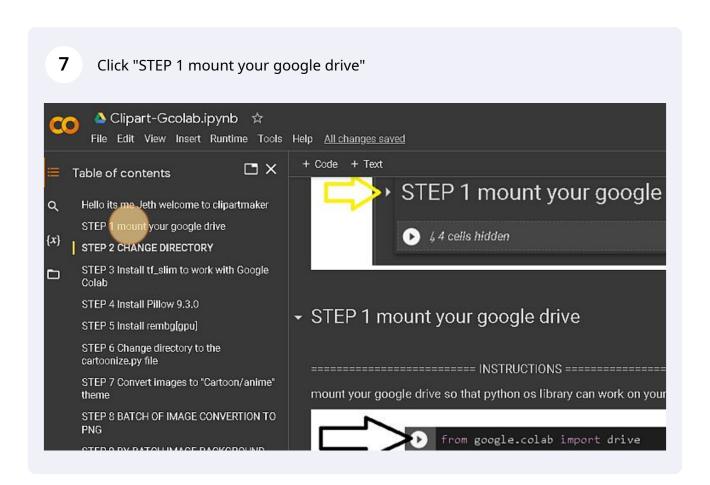
#### 3 Click notebook Settings Hello its me Jeth Welcome to clipartmaker Cut cell or selection $\{x\}$ Copy cell or selection This is a program I made to process images to clipart for my interr Paste This will process up to 500 images (in about 2-3mins using GPU ru Ctrl+M D pop-up bit will still continue don't worry Delete selected cells Ctrl+H It will not process .HEIC, .gif, .jiff image file format (you don't have Find and replace Ctrl+G behind in the test\_images folder not the final output folder) Find next Find previous Ctrl+Shift+G process goes like this: 1. get images from test\_images Notel ings turn to cartoon theme cartoonized\_images (using cartoonize. Clear all outputs 3. get images from cartoonized\_images and convert to png file 4. save images converted to png in cartoonized\_images 5. get images from cartoonized\_images and remove backgroun 6. save to the specified folder in output\_dir make sure to delete the images inside test\_images and cartoonize CLICK HERE TO OPEN INSTRUCTIONS

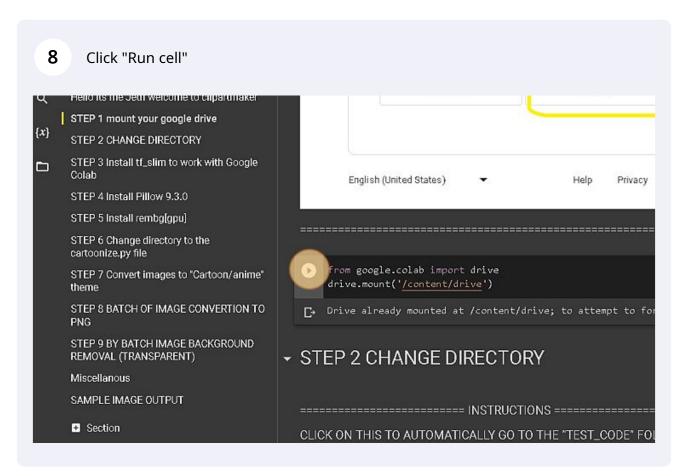


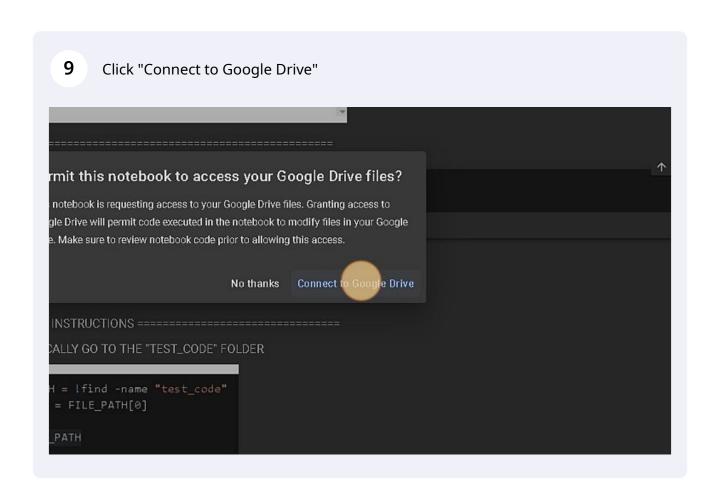
Cancel Save

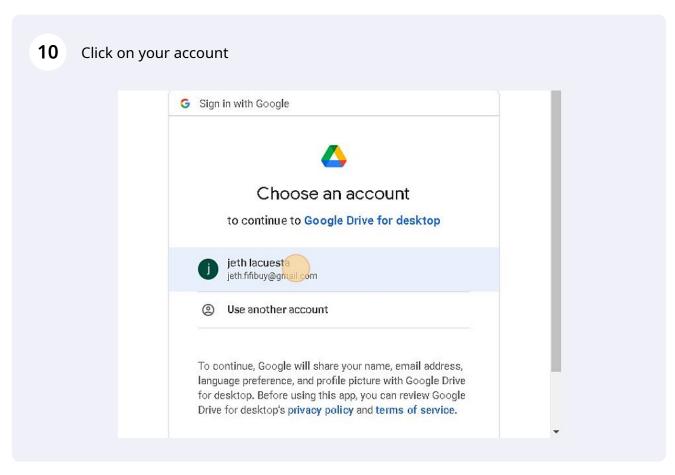
Cyour google drive

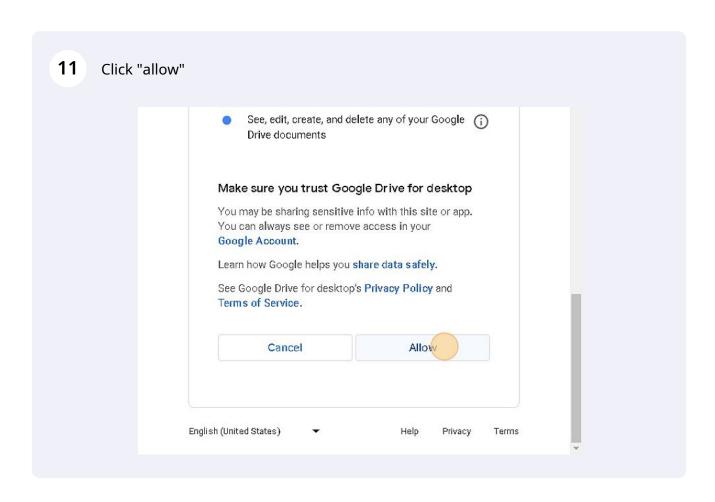


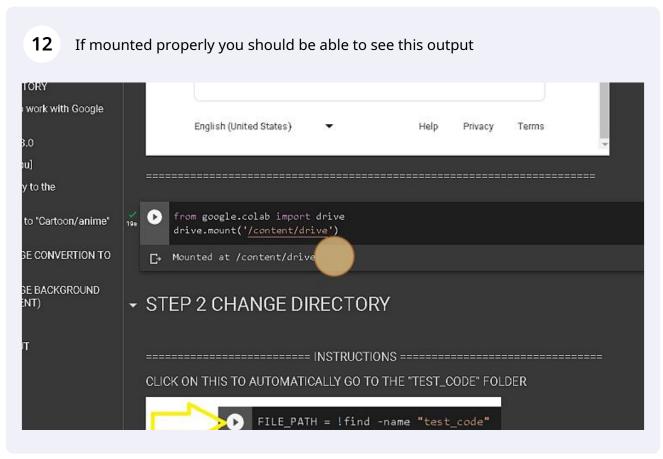




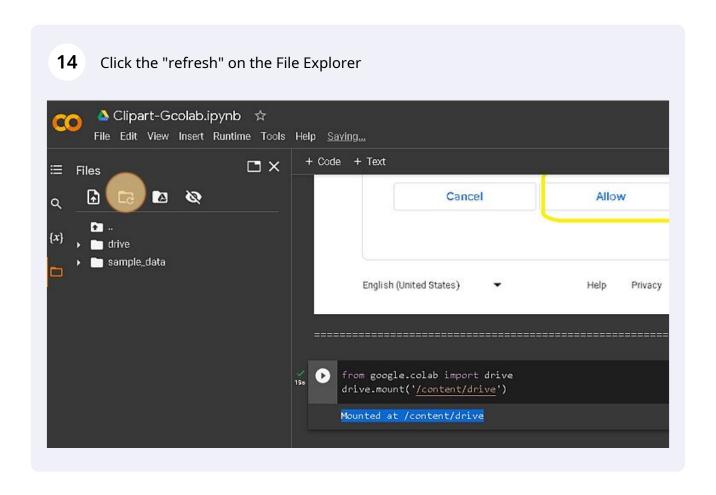




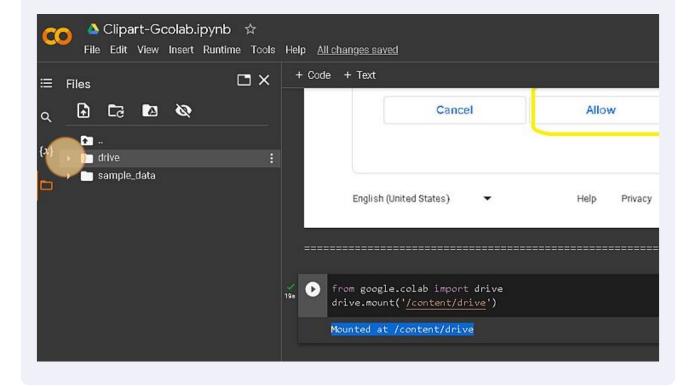




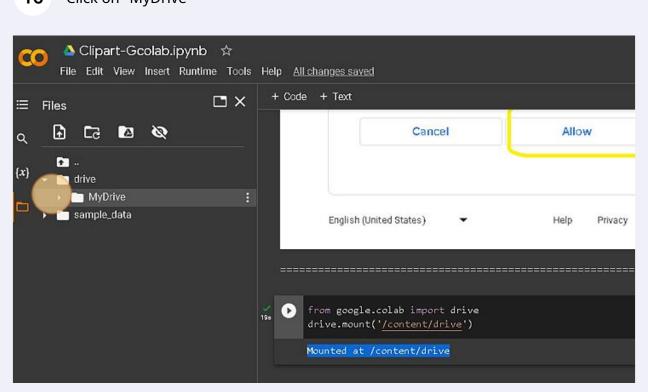
#### 13 Click "Files" 📤 Clipart-Gcolab.ipynb 🛚 🜣 File Edit View Insert Runtime Tools Help + Code + Text Table of contents Cancel Allow Q Hello its me Jeth welcome to clipartmaker STEP 1 mount your google drive {x} STEP 2 CHANGE DIRECTORY STEP 3 Install tf\_slim to work with Google English (United States) Help Privacy STEP 4 Install Pillow 9.3.0 STEP 5 Install rembg[gpu] STEP 6 Change directory to the cartoonize.py file from google.colab import drive 0 STEP 7 Convert images to "Cartoon/anime" 19s drive.mount('/content/drive') STEP 8 BATCH OF IMAGE CONVERTION TO Mounted at /content/drive PNG



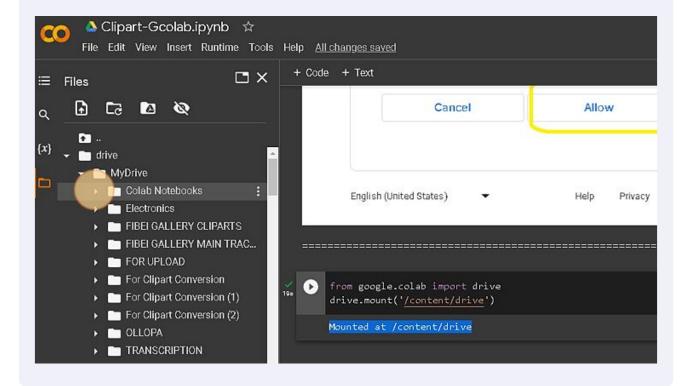
### **15** Expand your "drive" google drive folder



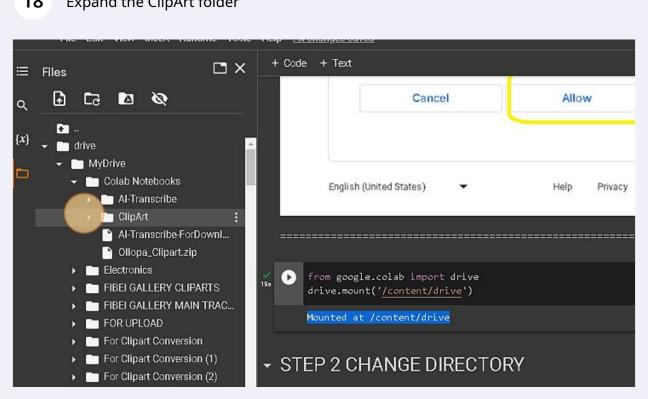
## 16 Click on "MyDrive"



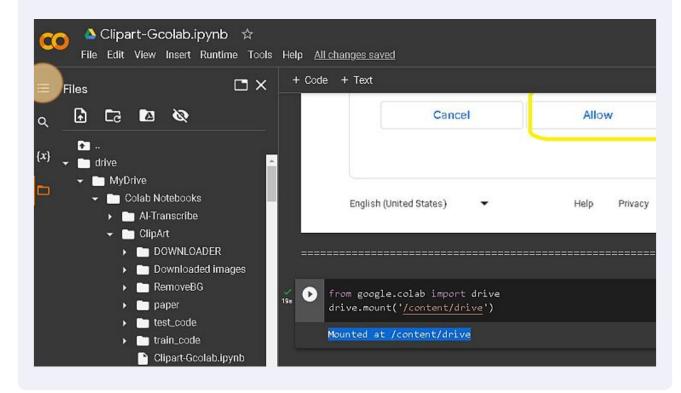
#### 17 Navigate to where you uploaded the Clipart program folder

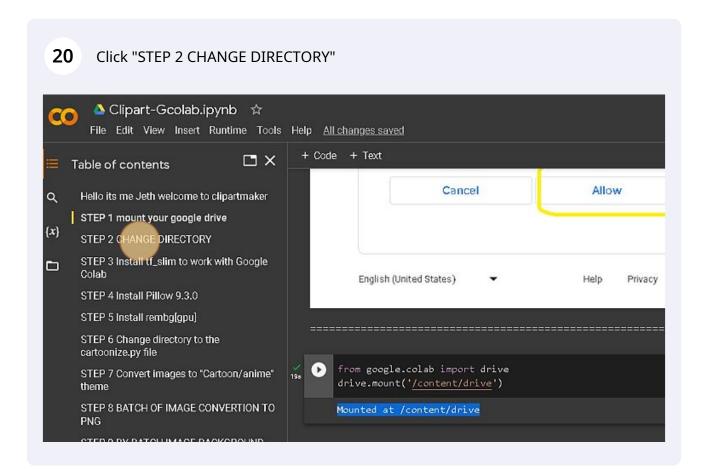


#### **18** Expand the ClipArt folder

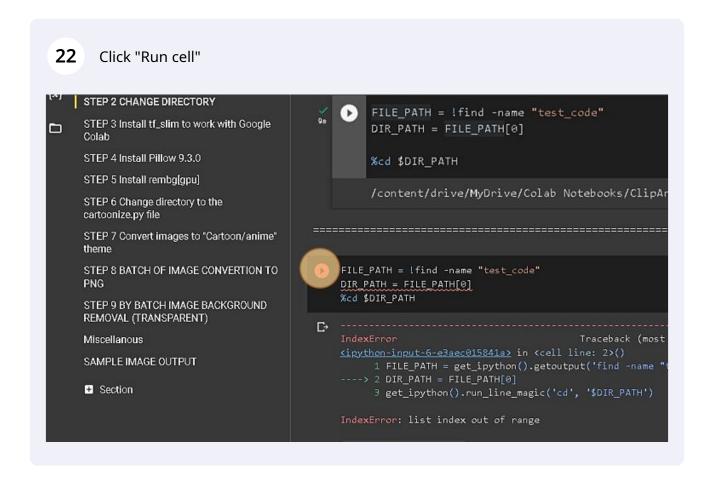


If mounted properly, you should be able to see your files. Then Click on "Table of Contents"

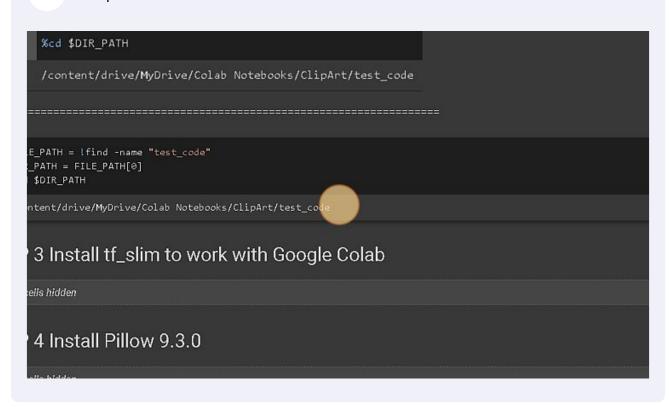




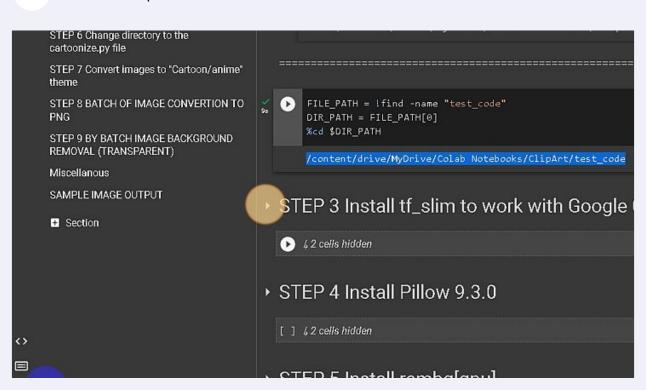
# 



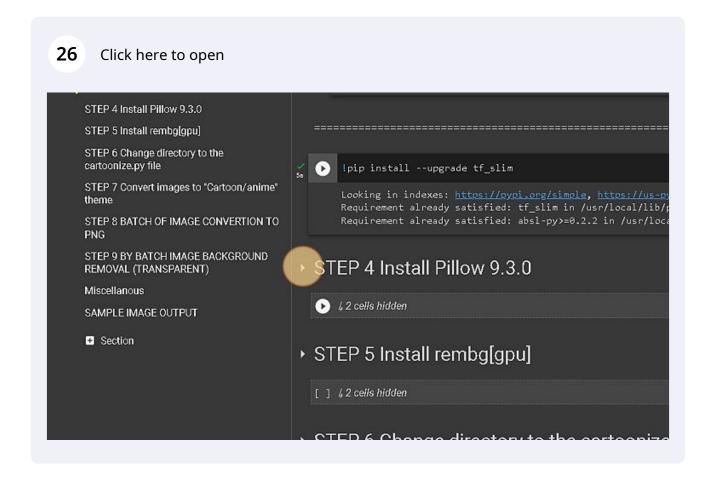
#### 23 Output should look like this

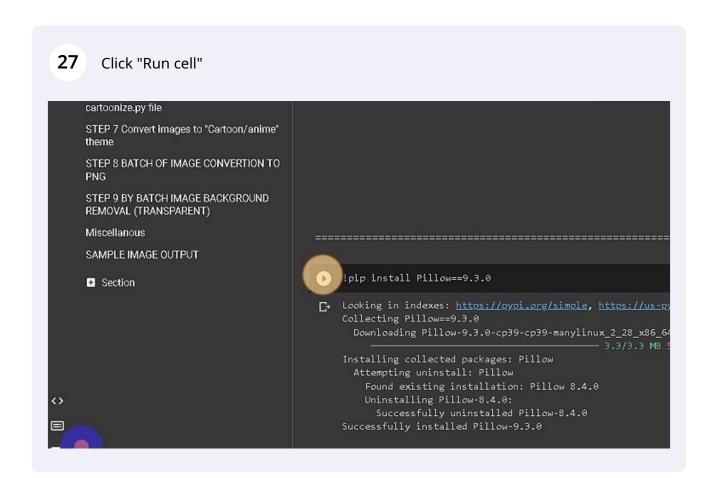


#### Move to Step 3, Unhide the Tab instructions



#### 25 Click "Run cell" !pip install --upgrade tf\_slim STEP 8 BATCH OF IMAGE CONVERTION TO STEP 9 BY BATCH IMAGE BACKGROUND ONCE DONE OUTPUT SHOULD BE REMOVAL (TRANSPARENT) Miscellanous !pip install --upgrade tf\_slim SAMPLE IMAGE OUTPUT Looking in indexes: https://pypi.org/simple, htt Requirement already satisfied: tf\_slim in /usr/lc + Section Requirement already satisfied: absl-py>=0.2.2 in !pip install --upgrade tf\_slim <> Looking in indexes: https://pypi.org/simple, https://us-p Requirement already satisfied: tf\_slim in /usr/local/lib/ Requirement already satisfied: absl-py>=0.2.2 in /usr/local 9s completed at 12

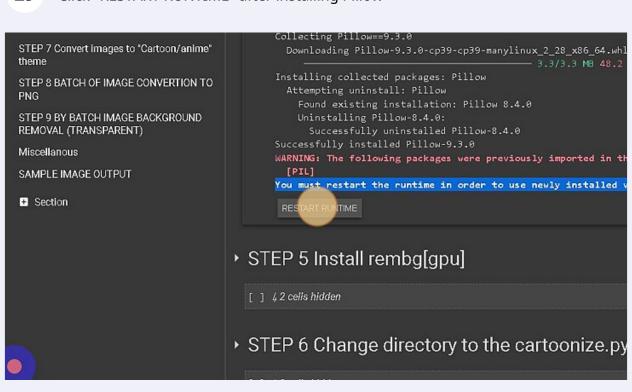




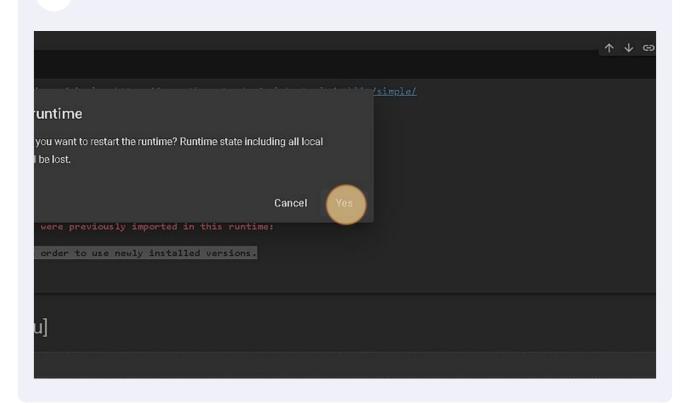
NOTICE "WARNING: The following packages were previously imported in this runtime:
[PIL]

You must restart the runtime in order to use newly installed v..."

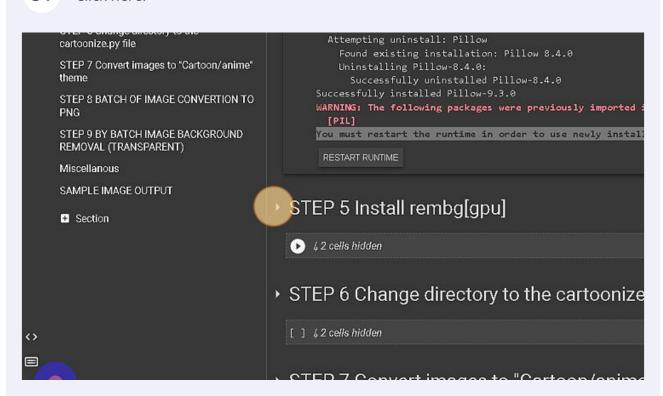
# 29 Click "RESTART RUNTIME" after installing Pillow



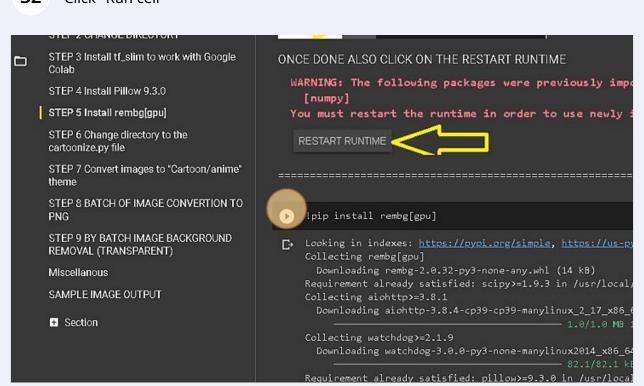
30 Click "Yes"



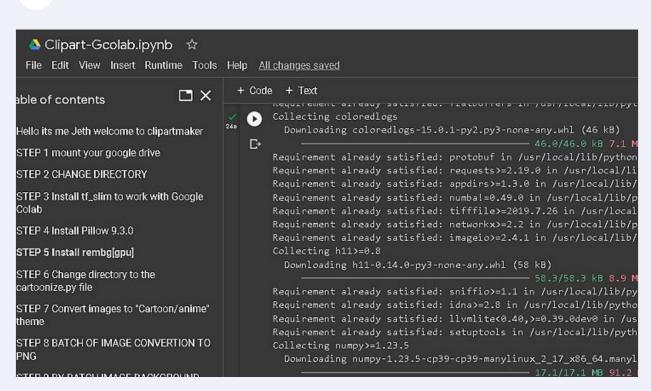
#### 31 Click here.



#### 32 Click "Run cell"



#### **33** Click "RESTART RUNTIME"



#### 34 Click "Yes"

```
: imageio>=2.4.1 in /usr/local/lib/python3.9/dist-packages (from scikit-image>=0.19.3->rembg[gpu]) (2.25.1)

none-any.whl (58 k8)

58.3/58.3 k8 8.9 M3/s eta 0:00:00

truntime

re you want to restart the runtime? Runtime state including all local
will be lost.

Cancel

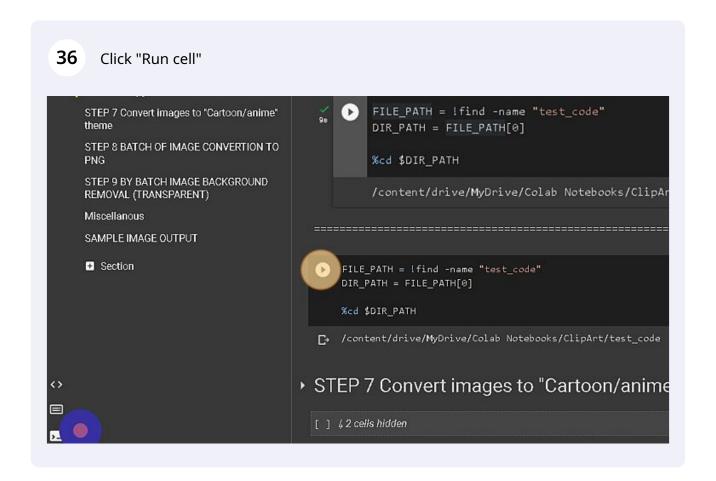
Yes

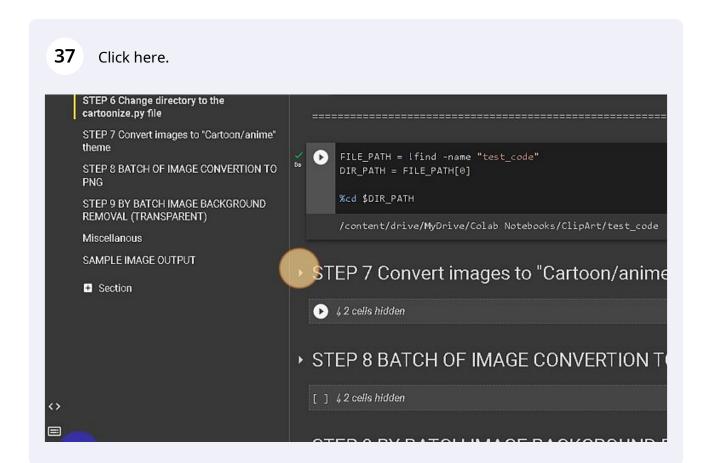
Cancel

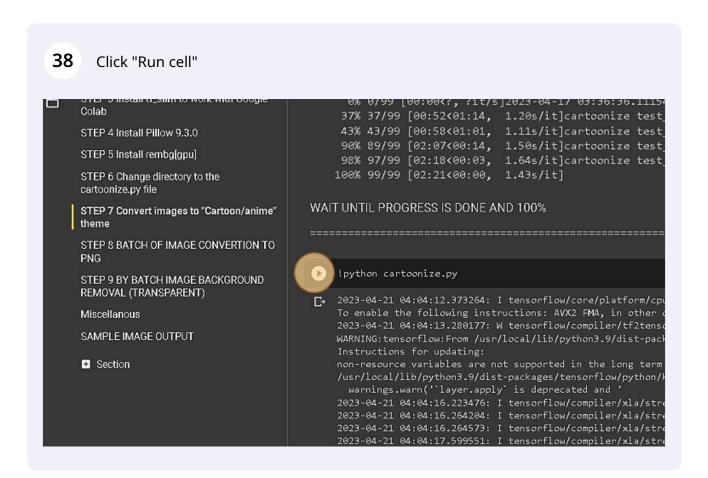
Yes

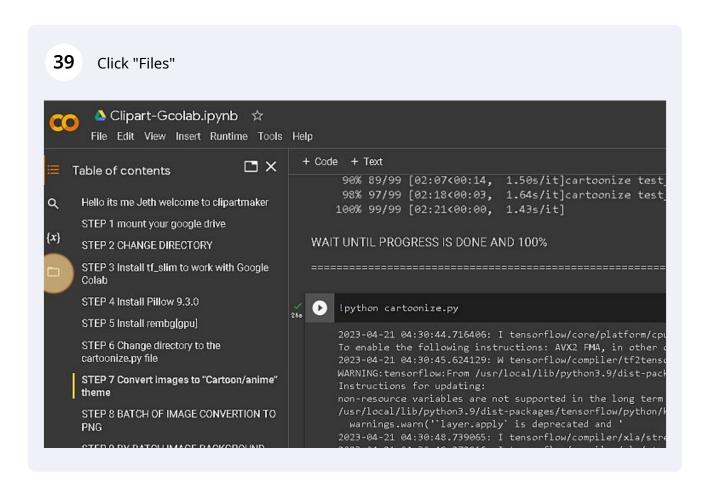
(from requests>=2.19.0->pooch>=1.6.0->rembg[gpu]) (67 m requests>=2.19.0->pooch>=1.6.0->rembg[gpu]) (7.3.0 m requests>=2.19.0->pooch>=1.3.1->rembg[gpu]) (7.3.0 m requests>=2.19.0->pooch>=1.3.0 m requests>=2.19.0->pooch>=1.3.1->rembg[gpu]
```

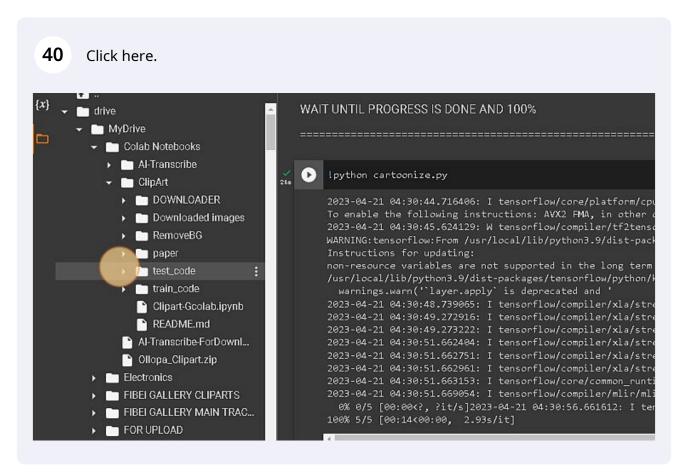
#### 35 Click here. {x} Found existing installation: numpy 1.22.4 STEP 2 CHANGE DIRECTORY Uninstalling numpy-1.22.4: STEP 3 Install tf\_slim to work with Google Successfully uninstalled numpy-1.22.4 Successfully installed aiohttp-3.8.4 aiosignal-1.3.1 async WARNING: The following packages were previously imported STEP 4 Install Pillow 9.3.0 [numpy] You must restart the runtime in order to use newly install STEP 5 Install rembg[gpu] STEP 6 Change directory to the cartoonize.py file STEP 7 Convert images to "Cartoon/anime" theme STEP 6 Change directory to the cartoonize STEP 8 BATCH OF IMAGE CONVERTION TO 4 2 cells hidden STEP 9 BY BATCH IMAGE BACKGROUND REMOVAL (TRANSPARENT) Miscellanous STEP 7 Convert images to "Cartoon/anime SAMPLE IMAGE OUTPUT [ ] 42 cells hidden Section

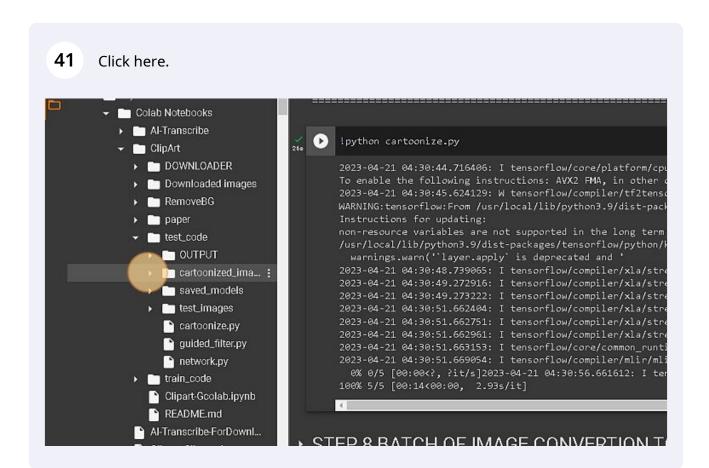


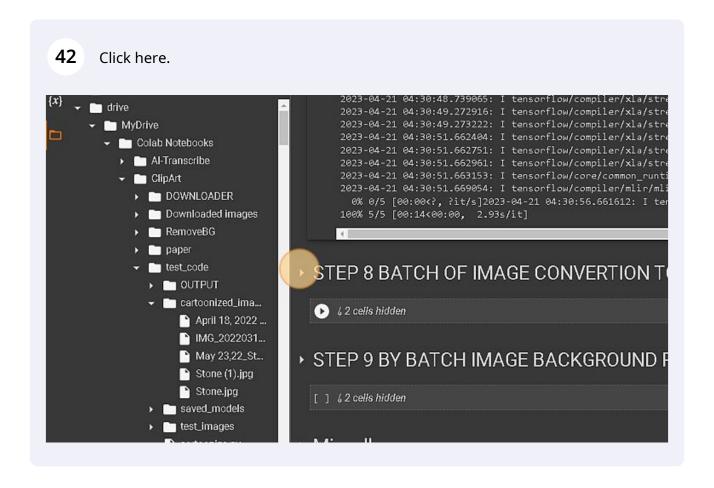


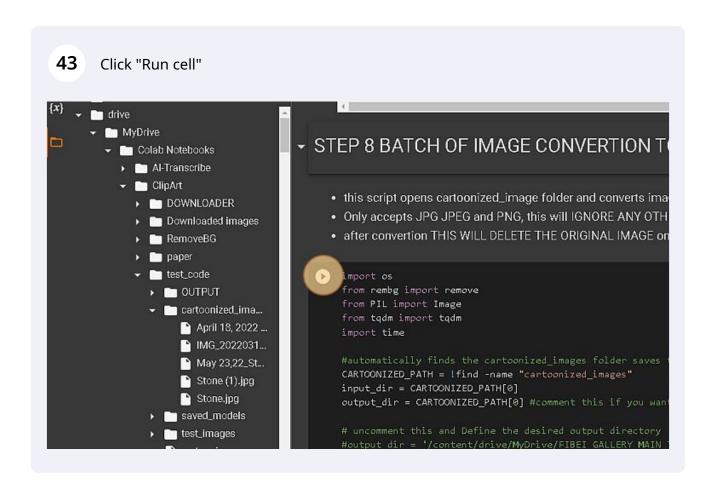




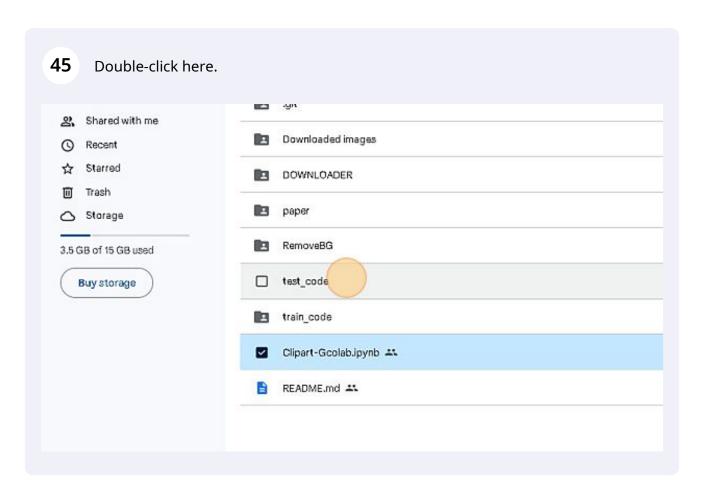


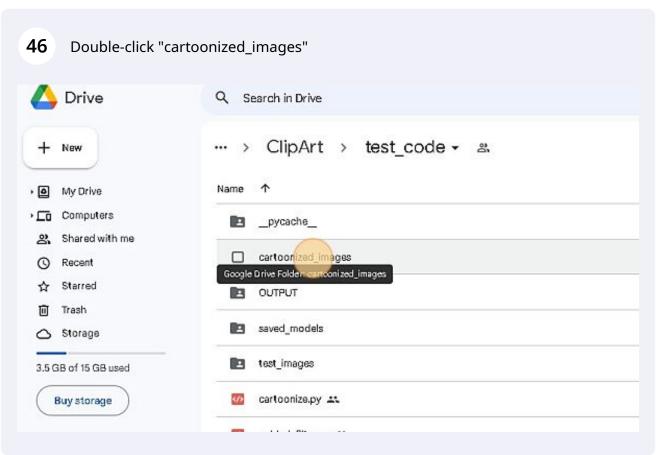






44 Switch to tab "ClipArt - Google Drive"





Notice "Converting images to png: 100% | 0000000 | 5/5 [00:00<00:00, 5.13 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00:00 | 5/5 [00

```
#rgb_im = input_image.convert('RGB')
#rgb_im.save(input_path)
img = Image.open(jpg_filepath)

# Convert the image to PNG format
png_filename = filename[:-5] + ".png"
#png_filepath = os.path.join(input_dir, png_filename)#store in the same folder
png_filepath = os.path.join(output_dir, png_filename) #store in another folder
img.save(png_filepath, "PNG")
os.remove(jpg_filepath) #delete the .jpg file
#print(png_filepath)

Converting images to png: 100%|

STEP 9 BY BATCH IMAGE BACKGROUND REMOVAL (TRANSPARENT)

[ ] 42 cells hidden

Miscellanous

CINCLE IMACE BACKGROUND REMOVED it is what it covit does
```