

```
!pip install face_recognition==1.3.0
```

```
Collecting face_recognition==1.3.0
  Downloading face_recognition-1.3.0-py2.py3-none-any.whl (15 kB)
Collecting face-recognition-models>=0.3.0 (from face_recognition==1.3.0)
  Downloading face_recognition_models-0.3.0.tar.gz (100.1 MB)
    100.1/100.1 MB 8.9 MB/s eta 0:00:00
  Preparing metadata (setup.py) ... done
Requirement already satisfied: Click>=6.0 in /usr/local/lib/python3.10/dist-packages (from face_recognition==1.3.0) (8.1.7)
Requirement already satisfied: dlib>=19.7 in /usr/local/lib/python3.10/dist-packages (from face_recognition==1.3.0) (19.24.2)
Requirement already satisfied: numpy in /usr/local/lib/python3.10/dist-packages (from face_recognition==1.3.0) (1.23.5)
Requirement already satisfied: Pillow in /usr/local/lib/python3.10/dist-packages (from face_recognition==1.3.0) (9.4.0)
Building wheels for collected packages: face-recognition-models
  Building wheel for face-recognition-models (setup.py) ... done
  Created wheel for face-recognition-models: filename=face_recognition_models-0.3.0-py2.py3-none-any.whl size=100566170 sha256=f7421
  Stored in directory: /root/.cache/pip/wheels/7a/eb/cf/e9eced74122b679557f597bb7c8e4c739cfcac526db1fd523d
Successfully built face-recognition-models
Installing collected packages: face-recognition-models, face_recognition
Successfully installed face-recognition-models-0.3.0 face_recognition-1.3.0
```

```
# import necessary libraries
from PIL import Image # PIL : Python imaging library, image module allows reading and writing images with PIL
from PIL import ImageDraw # provides simple 2D graphics support for image object
import face_recognition # Find and manipulate facial features in pictures (REquires GPU)

from google.colab import files
files.upload()
```



[illegible]

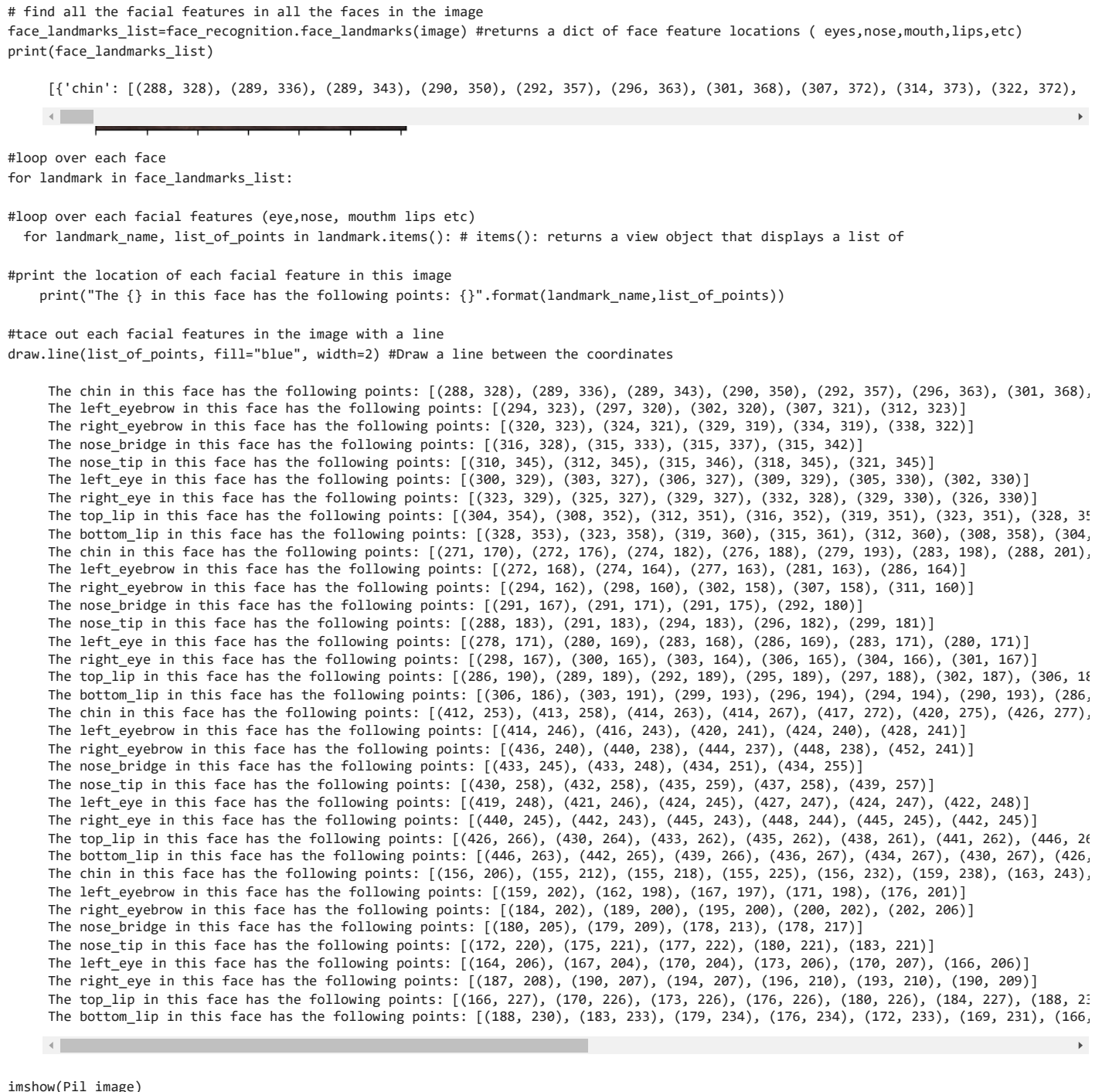
1...=1...17=1...171...d11...41...1=1...1411...0=1...d...01...d01...2=1...0=21...61...f2...71...41...21...f1...d=1...f01...d11...d1...1211...6=1...41...0=01...01...61...f01...0071

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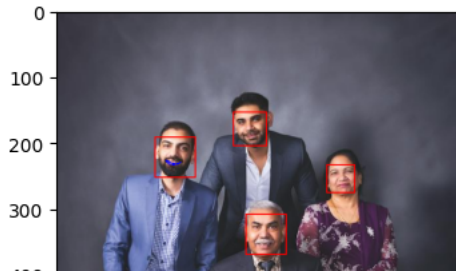
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```
from matplotlib.pyplot import imshow
imshow(Pil image) #Display data as an image
```





```
<matplotlib.image.AxesImage at 0x7cd047f57af0>
```



```
#generate the face encoding
```

```
#face encoding: A set of 128 measurements pertaining to facial
```

```
face_encodings = face_recognition.face_encodings(image)
```

```
print(face_encodings[0])
```

```
[ -0.05650221  0.08063693  0.05310322 -0.00132483  0.01846655 -0.10101923
   0.02294089 -0.16170666  0.19527918 -0.06389134  0.1644987  -0.09311113
  -0.18436506 -0.06559805  0.02360095  0.11435598 -0.15084748 -0.07130349
  -0.06618333 -0.03184713  0.07310598 -0.02424819  0.11910614 -0.02161946
  -0.10112044 -0.37642479 -0.12694359 -0.10914588  0.01444153  0.01595667
   0.02862314  0.04450171 -0.21505073 -0.11071189  0.00566127 -0.016451
  -0.00774453 -0.01533461  0.21189213 -0.00854161 -0.18262994  0.01159495
   0.00885826  0.19258076  0.14514397  0.01507853  0.06188073 -0.07889622
   0.04107583 -0.18829028  0.01178426  0.10592129  0.05773814  0.01925868
   0.061374  -0.08315782 -0.00250089  0.03862229 -0.17677578  0.05791203
   0.13145703 -0.07027361 -0.04453637  0.01704235  0.09634592  0.06231426
  -0.05810188 -0.09999506  0.10335405 -0.0991191  0.04261892 -0.006186
  -0.11436948 -0.22023454 -0.28577137  0.04531102  0.41826856  0.08430298
  -0.13345435  0.02484184 -0.12189553  0.01369577  0.07054904  0.01616685
  -0.0413275  0.02725303 -0.08518404  0.08417042  0.12247917 -0.10483877
  -0.05176128  0.16223326 -0.06456053  0.0200095  -0.01554481  0.06175155
  -0.10283795  0.05357068 -0.15577623  0.02433458  0.07918584 -0.0520961
   0.03764775  0.07967002 -0.18821357  0.10486598  0.00269042 -0.10306509
  -0.0189434  0.05312046 -0.10571219 -0.04383621  0.09489743 -0.16411629
   0.17558552  0.20968264 -0.04948496  0.17238507  0.02565608  0.07030515
   0.00730744  0.05233821 -0.10560808 -0.09533525  0.01577231  0.14478265
   0.03155017  0.0132533 ]
```