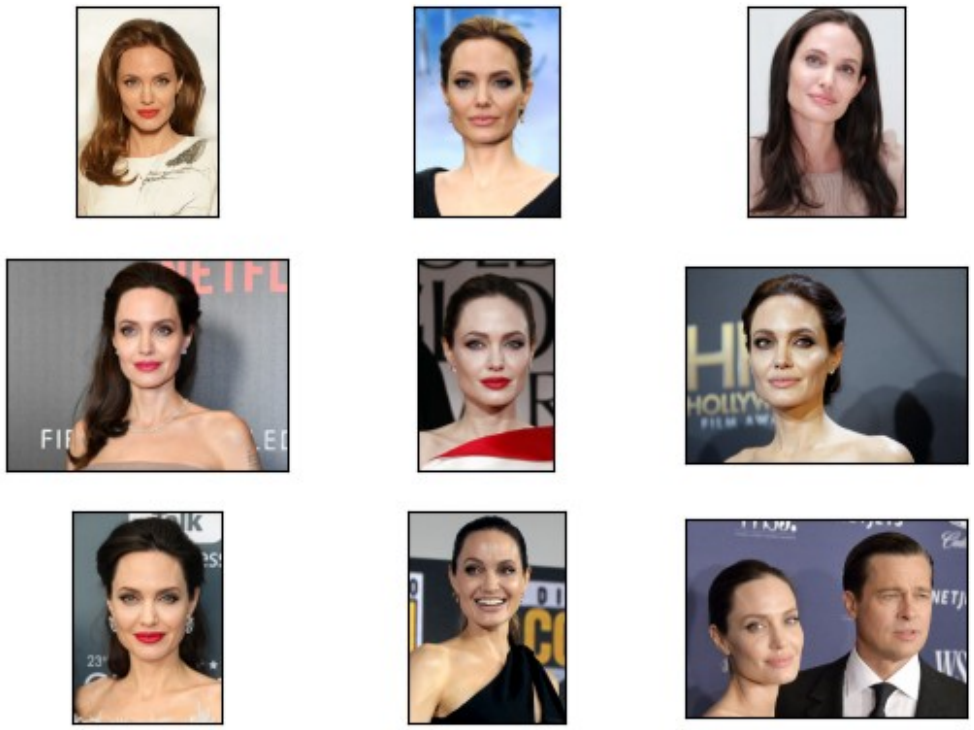
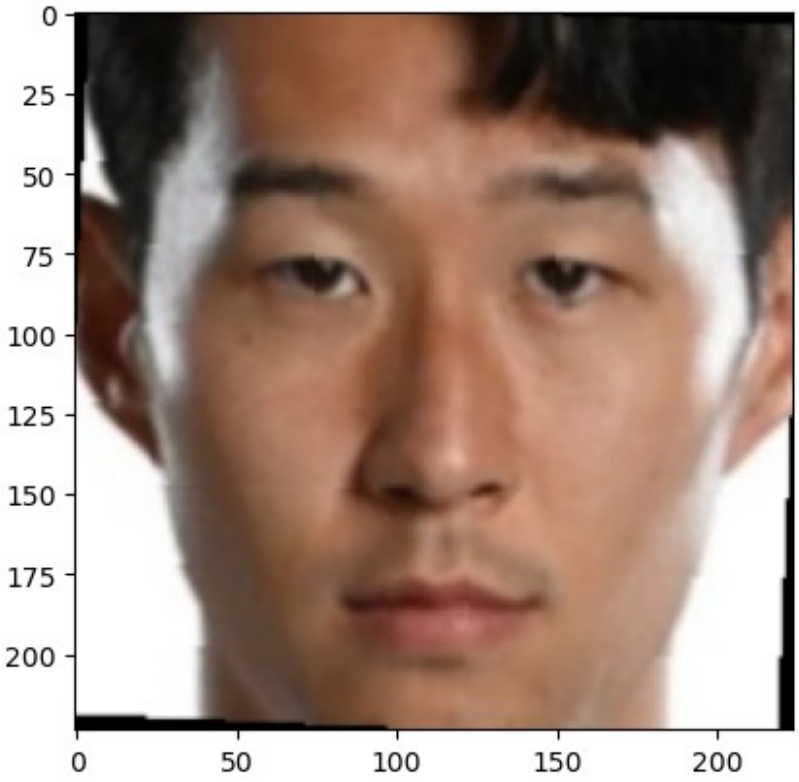
```
from deepface import DeepFace
import matplotlib.pyplot as plt
import pandas as pd

image_paths = ['./tests/dataset/img7.jpg',
'./tests/dataset/img10.jpg', './tests/dataset/img11.jpg',
'./tests/dataset/img2.jpg',
             './tests/dataset/img5.jpg', './tests/dataset/img4.jpg',
'./tests/dataset/img6.jpg', './tests/dataset/img1.jpg',
             './tests/dataset/couple.jpg']

''' Angelina Jolie
0    ./tests/dataset//img7.jpg        34        12        94        94

1   ./tests/dataset//img10.jpg        34        12        94        94

2   ./tests/dataset//img11.jpg        34        12        94        94

3    ./tests/dataset//img2.jpg        34        12        94        94

4    ./tests/dataset//img5.jpg        34        12        94        94

5    ./tests/dataset//img4.jpg        34        12        94        94

6    ./tests/dataset//img6.jpg        34        12        94        94

7    ./tests/dataset//img1.jpg        34        12        94        94

8  ./tests/dataset//couple.jpg        34        12        94        94

'''

images = [plt.imread(image_path) for image_path in image_paths]

fig, axes = plt.subplots(3, 3)

for i in range(9):
    axes[i // 3, i % 3].imshow(images[i])

for ax in axes.flatten():
    ax.set_xticks([])
    ax.set_yticks([])

plt.show()

print("Test Data Images -    ")
```



```
Test Data Images -

img1_path = './tests/dataset/img1.jpg'
img2_path = './tests/dataset/img2.jpg'

DeepFace.verify(img1_path = img1_path, img2_path = img2_path)

{'verified': True,
 'distance': 0.2555360336003648,
 'threshold': 0.4,
 'model': 'VGG-Face',
 'detector_backend': 'opencv',
 'similarity_metric': 'cosine',
 'facial_areas': {'img1': {'x': 345, 'y': 211, 'w': 769, 'h': 769},
  'img2': {'x': 516, 'y': 192, 'w': 512, 'h': 512}},
 'time': 0.31}

model_name = 'ArcFace'

# Recognition
source = DeepFace.detectFace('source.jpg')
plt.imshow(source)
df = DeepFace.find('source.jpg', db_path = './tests/dataset/',
model_name = model_name)
print(df)

⚠ Function detectFace is deprecated. Use extract_faces instead.
WARNING: Representations for images in ./tests/dataset/ folder were
```

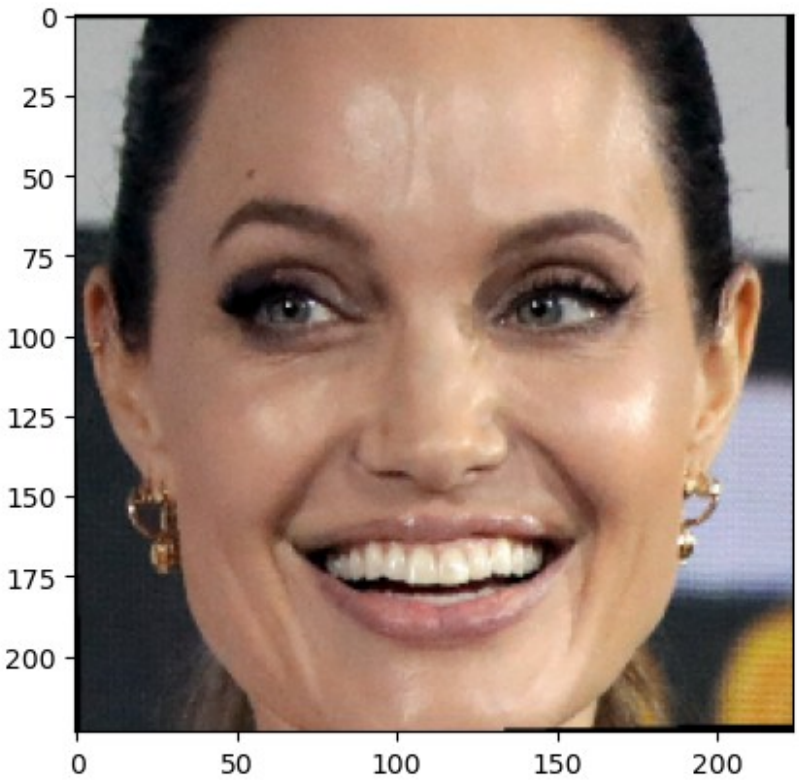
```
previously stored in representations_arcface.pkl. If you added new
instances after the creation, then please delete this file and call
find function again. It will create it again.
There are  67  representations found in  representations_arcface.pkl
find function lasts  0.060521841049194336  seconds
[Empty DataFrame
Columns: [identity, source_x, source_y, source_w, source_h,
ArcFace_cosine]
Index: []]
```




```
# Recognition
source2 = DeepFace.detectFace('source2.jpg')
plt.imshow(source2)
df = DeepFace.find('source2.jpg', db_path = './tests/dataset/',
model_name = model_name)
print(df)
```

```
⚠ Function detectFace is deprecated. Use extract_faces instead.
WARNING: Representations for images in ./tests/dataset/ folder were
previously stored in representations_arcface.pkl. If you added new
instances after the creation, then please delete this file and call
find function again. It will create it again.
There are  67  representations found in  representations_arcface.pkl
find function lasts  0.16852068901062012  seconds
[                     identity  source_x  source_y  source_w
```

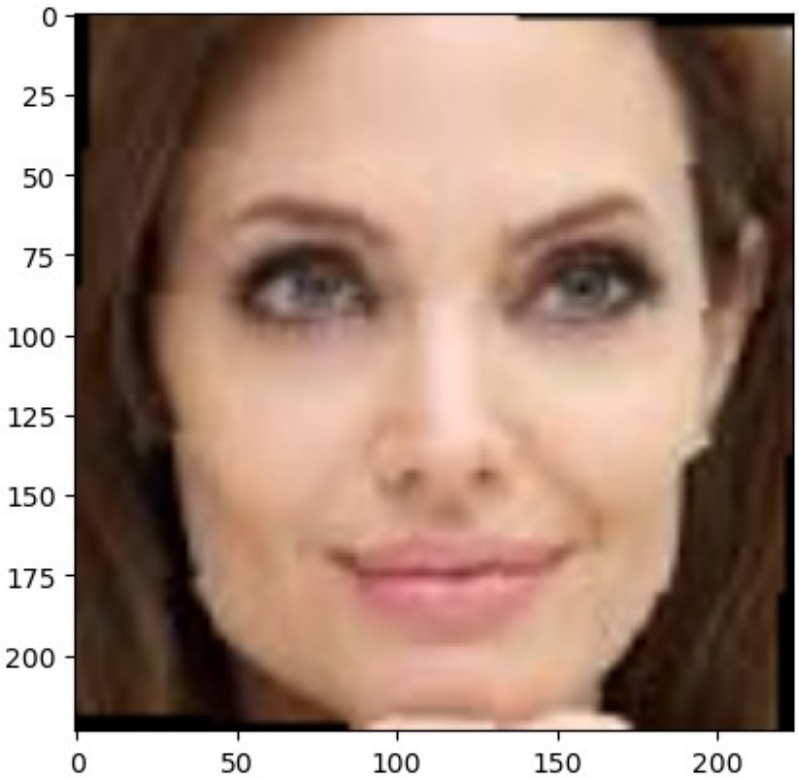
```
source_h  \
0    ./tests/dataset//img1.jpg       345       211       769       769

1  ./tests/dataset//couple.jpg       345       211       769       769

2    ./tests/dataset//img4.jpg       345       211       769       769

3    ./tests/dataset//img5.jpg       345       211       769       769

4    ./tests/dataset//img7.jpg       345       211       769       769

5    ./tests/dataset//img2.jpg       345       211       769       769

6   ./tests/dataset//img11.jpg       345       211       769       769

7    ./tests/dataset//img6.jpg       345       211       769       769

8   ./tests/dataset//img10.jpg       345       211       769       769


   ArcFace_cosine
0        0.000000
1        0.399647
2        0.459549
3        0.472917
4        0.473010
5        0.493950
6        0.509957
7        0.541251
8        0.557641  ]
```




```
# Recognition
source3 = DeepFace.detectFace('source3.jpg')
plt.imshow(source3)
df = DeepFace.find('source3.jpg', db_path = './tests/dataset/',
model_name = model_name)
print(df)
```

```
⚠ Function detectFace is deprecated. Use extract_faces instead.
WARNING: Representations for images in ./tests/dataset/ folder were
previously stored in representations_arcface.pkl. If you added new
instances after the creation, then please delete this file and call
find function again. It will create it again.
There are  67  representations found in  representations_arcface.pkl
find function lasts  0.04310894012451172  seconds
[                      identity  source_x  source_y  source_w
source_h  \
0    ./tests/dataset//img7.jpg        34        12        94        94

1   ./tests/dataset//img10.jpg        34        12        94        94

2   ./tests/dataset//img11.jpg        34        12        94        94

3    ./tests/dataset//img2.jpg        34        12        94        94

4    ./tests/dataset//img5.jpg        34        12        94        94
```

```
5    ./tests/dataset//img4.jpg        34        12        94        94

6    ./tests/dataset//img6.jpg        34        12        94        94

7    ./tests/dataset//img1.jpg        34        12        94        94

8  ./tests/dataset//couple.jpg        34        12        94        94


   ArcFace_cosine
0        0.300935
1        0.374866
2        0.384205
3        0.392222
4        0.395995
5        0.397920
6        0.431287
7        0.622992
8        0.645592  ]
```




```
#    ,  ,  ,
DeepFace.analyze(img_path = 'source2.jpg',
                 actions = ['age', 'gender', 'race', 'emotion']
)
```

```
Action: emotion: 100%|████████████████████████| 4/4 [00:00<00:00,
33.29it/s]

[{'age': 31,
  'region': {'x': 345, 'y': 211, 'w': 769, 'h': 769},
  'gender': {'Woman': 99.99407529830933, 'Man': 0.005923582284594886},
  'dominant_gender': 'Woman',
  'race': {'asian': 9.931624680757523,
   'indian': 13.22040855884552,
   'black': 3.6350540816783905,
   'white': 23.476317524909973,
   'middle eastern': 20.396971702575684,
   'latino hispanic': 29.33962643146515},
  'dominant_race': 'latino hispanic',
  'emotion': {'angry': 6.4263373507915516e-21,
   'disgust': 0.0,
   'fear': 1.158562056233721e-26,
   'happy': 100.0,
   'sad': 5.227795430007972e-17,
   'surprise': 4.701574546350784e-09,
   'neutral': 4.417989085681029e-07},
  'dominant_emotion': 'happy'}]
```