

```
In [45]: from deepface import DeepFace
import os
import time
import playsound
```

```
In [49]: print("Choose From The Following:\n")
print("happy1.jpg")
print("happy2.jpg")
print("sad1.jpg")
print("sad2.jpg")
print("neutral1.jpg")
print("neutral2.jpg")
```

Choose From The Following:

```
happy1.jpg
happy2.jpg
sad1.jpg
sad2.jpg
neutral1.jpg
neutral2.jpg
Enter the image name : happy1.jpg
```

```
In [50]: import cv2
import matplotlib.pyplot as plt
image=cv2.imread(my_image)
plt.imshow(image[:, :, ::-1])
```



```
In [51]: from deepface import DeepFace
result=DeepFace.analyze(image,actions=["emotion"])
print(result)
l=list(result.items())
ll=list(l[-1])
```

```
{'emotion': {'angry': 0.14708104721567317, 'disgust': 3.12050615550482
```

```
In [53]: def speak(text):
          tts=gTTS(text=text,lang="en")
          filename="voice4.mp3"
          tts.save(filename)
          playsound.playsound(filename)
          text=l1[-1]
```

```
In [*]: import serial
import time
import os

ser=serial.Serial("COM3",9600)
def emotion():
    if (text=="happy"):
        time.sleep(0.1)
        ser.write(b'Happy')
        emotion()
    elif (text=="neutral"):
        time.sleep(0.1)
        ser.write(b'Neutral')
        emotion()
    elif (text=="sad"):
        time.sleep(0.1)
        ser.write(b'Sad')
        emotion()
time.sleep(2) # wait for the serial connection to initialize
```

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In [ ]:
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In [ ]:
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