**Fun with Face Recognition: Say Cheese! 📸**

Hello there, budding face recognition experts! Get ready to dive into the world of face recognition and create an exciting program that can detect familiar faces. With this magical code, you can see the names of people you know as you look at them through the camera. Let's embark on this fun face recognition adventure together! 🤩

**Step 1: Setting up the Magic**

First things first, make sure you have installed the required libraries, OpenCV (cv2) and simple\_facerec. If you haven't, don't worry, just wave your coding wand and install them with a magical command:

pip install opencv-python

pip install simple\_facerec

Now that the magic libraries are ready, let's start coding! 🪄

# Import the OpenCV library and the SimpleFacerec class

import cv2

from simple\_facerec import SimpleFacerec

# Create a SimpleFacerec instance

sfr = SimpleFacerec()

# Load the face encodings from images in a folder

sfr.load\_encoding\_images("images/")

**Step 2: Capturing the Magic with the Camera**

Time to add some enchantment to your code! In this step, we'll activate the camera and begin the face recognition process. Are you ready for the magic to unfold? 🌟

# Load the camera

cap = cv2.VideoCapture(0)

while True:

# Capture a frame from the camera

ret, frame = cap.read()

# Detect Faces

face\_locations, face\_names = sfr.detect\_known\_faces(frame)

# Iterate through the detected faces and draw rectangles around them

for face\_loc, name in zip(face\_locations, face\_names):

y1, x2, y2, x1 = face\_loc[0], face\_loc[1], face\_loc[2], face\_loc[3]

# Add the name as a label above the face

cv2.putText(frame, name, (x1, y1 - 10), cv2.FONT\_HERSHEY\_DUPLEX, 1, (0, 0, 200), 2)

# Draw a rectangle around the face

cv2.rectangle(frame, (x1, y1), (x2, y2), (0, 0, 200), 4)

# Show the magic on the screen!

cv2.imshow("Frame", frame)

# Press 'Esc' key to exit the magic

key = cv2.waitKey(1)

if key == 27:

break

# Release the camera and close all magic windows

cap.release()

cv2.destroyAllWindows()

**The Grand Finale**

Yay! 🎉 You've completed the magical face recognition code! Now, run the program, and as you look at the camera, the magic will detect familiar faces and display their names on the screen.

Make sure you have some images of familiar faces in the "images" folder to recognize them accurately. Remember, this is just the beginning of your face recognition journey. With more training and practice, you can create even more exciting and intelligent face recognition systems!

So, go ahead, spread the magic of face recognition, and capture some delightful moments with this enchanting code. Keep coding, and let the magic of technology amaze you at every step! Happy face recognizing! 😃✨

**OUTPUT:**

