

# Code for Facial Emotion Recognition

```
import cv2

from deepface import DeepFace

def detect_emotion(frame):
    try:
        result = DeepFace.analyze(frame, actions=['emotion'], enforce_detection=False)
        dominant_emotion = result[0]['dominant_emotion']
        return dominant_emotion
    except:
        return "No Face"

# Start webcam
cap = cv2.VideoCapture(0)

print("Press 'q' to quit")

while True:
    ret, frame = cap.read()
    if not ret:
        break

    frame = cv2.flip(frame, 1) # Mirror for natural view
    emotion = detect_emotion(frame)

    cv2.putText(frame, f'Emotion: {emotion}', (30, 50),
                cv2.FONT_HERSHEY_SIMPLEX, 1, (255, 255, 0), 2)

    cv2.imshow("Emotion Detection", frame)
```

```
if cv2.waitKey(1) & 0xFF == ord('q'):
```

```
    break
```

```
cap.release()
```

```
cv2.destroyAllWindows()
```