**Lesson 4: Reading and Writing Videos**

🎥 **Reading video from file**:

cap = cv2.VideoCapture('video.mp4')

📹 **Accessing your webcam**:

cap = cv2.VideoCapture(0)

🔁 **Read and display frames in a loop**:

while cap.isOpened():

ret, frame = cap.read()

if not ret:

break

cv2.imshow('Frame', frame)

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

break

💾 **Writing video output**:

out = cv2.VideoWriter('output.avi', cv2.VideoWriter\_fourcc(\*'XVID'), 20.0, (640, 480))

out.write(frame)

✅ **Always release resources**:

cap.release()

out.release()

cv2.destroyAllWindows()