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Source code:

```python
import cv2
import numpy as np

cap = cv2.VideoCapture(r"D:\\CV\\Lab2\\vtv1.mp4")
logo = cv2.imread(r"D:\\CV\\Lab2\\img.png")

hsvr = cv2.cvtColor(logo, cv2.COLOR_BGR2HSV)
M = cv2.calcHist([hsvr], [0, 1], None, [180, 256], [0, 180, 0, 256])

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

    blur = cv2.GaussianBlur(frame, (5, 5), 0) #5,5

    hsvt = cv2.cvtColor(blur, cv2.COLOR_BGR2HSV)
    I = cv2.calcHist([hsvt], [0, 1], None, [180, 256], [0, 180, 0, 256])

    #R = I / (M + 1)
    R = M / (I + 1)

    h, s, v = cv2.split(hsvt)

    B = R[h.ravel(), s.ravel()]
    B = np.minimum(B, 1)
    B = B.reshape(hsvt.shape[:2])

    disc = cv2.getStructuringElement(cv2.MORPH_ELLIPSE, (5, 5))
    cv2.filter2D(B, -1, disc, B)
    B = np.uint8(B)
    cv2.normalize(B, B, 0, 255, cv2.NORM_MINMAX)
```

PROBLEMS   OUTPUT   DEBUG CONSOLE   **TERMINAL**   PORTS

PS C:\Users\11112> & C:/Users/11112/AppData/Local/Programs/Python/Python311/python.exe d:/CV/Lab2/logo_detect2.py
PS C:\Users\11112>

```python
    ret, thresh = cv2.threshold(B, 10, 255, cv2.THRESH_BINARY)

    contours, _ = cv2.findContours(
        thresh, cv2.RETR_TREE, cv2.CHAIN_APPROX_SIMPLE
    )

    largest_contour = None
    max_area = 0
    for cnt in contours:
        area = cv2.contourArea(cnt)
        if area > max_area:
            largest_contour = cnt
            max_area = area

    if largest_contour is not None:
        x, y, w, h = cv2.boundingRect(largest_contour)
        cv2.rectangle(
            frame, (x, y), (x + w, y + h), (0, 225, 225), 3
        )

    cv2.imshow("Logo Taget", frame)

    if cv2.waitKey(40) & 0xFF == ord("q"):
        break

cap.release()
cv2.destroyAllWindows()
```