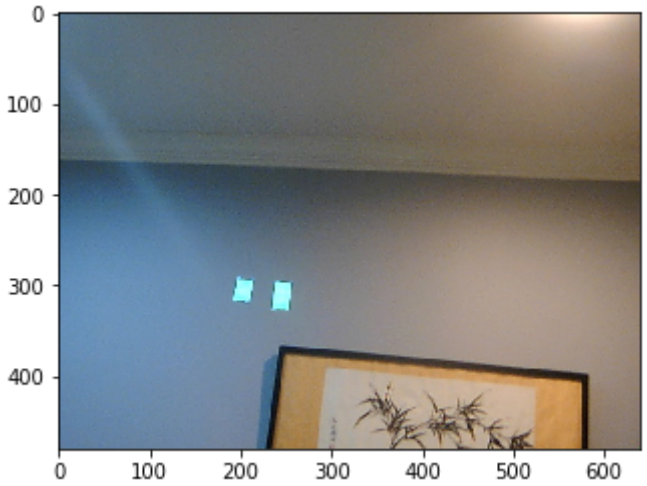
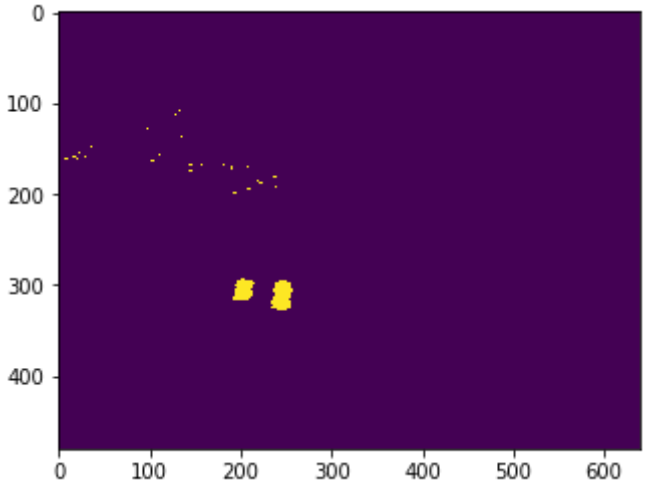
In [180]:
```
%matplotlib inline
import matplotlib.image as mpimg
from matplotlib import pyplot as plt
import cv2
import numpy as np

img = mpimg.imread('/vagrant/notebooks/sony_still_of_tape.jpg')
plt.imshow(img)
```

Out[180]: <matplotlib.image.AxesImage at 0x7fde0fa493c8>



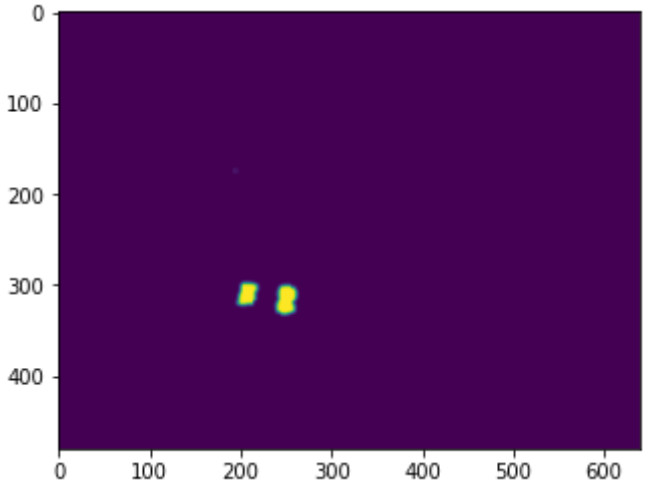
In [181]:
```
lower = np.array([85,50,50])  # HSV
upper = np.array([93,255,255])
tape_hsv = cv2.cvtColor(img, cv2.COLOR_RGB2HSV)
res = cv2.inRange(tape_hsv, lower, upper)
plt.imshow(res)
```

Out[181]: <matplotlib.image.AxesImage at 0x7fde0fa06128>



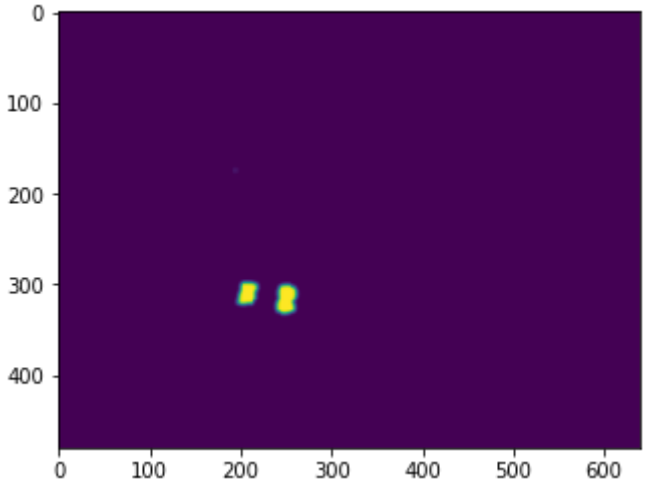
In [182]:
```
kernel = np.ones((4,4),np.uint8)
opened = cv2.morphologyEx(blur, cv2.MORPH_OPEN, kernel)
plt.imshow(opened)
```

Out[182]: <matplotlib.image.AxesImage at 0x7fde0fa3d7f0>



In [183]:
```
blur = cv2.blur(opened, (3,3))
plt.imshow(blur)
```

Out[183]: <matplotlib.image.AxesImage at 0x7fde0f9f8048>



In [184]:
```
  (_, cnts, _) = cv2.findContours(blur.copy(), cv2.RETR_EXTERNAL, cv2.CH
AIN_APPROX_SIMPLE)
```

In [185]:
```
cnt1 = sorted(cnts, key = cv2.contourArea, reverse = True)[0]
cnt2 = sorted(cnts, key = cv2.contourArea, reverse = True)[1]
rect1 = np.int32(cv2.boxPoints(cv2.minAreaRect(cnt1)))
rect2 = np.int32(cv2.boxPoints(cv2.minAreaRect(cnt2)))
cv2.drawContours(img, [rect1], -1, (255, 0, 0), 2)
cv2.drawContours(img, [rect2], -1, (255, 0, 0), 2)
plt.imshow(img)
```

Out[185]: <matplotlib.image.AxesImage at 0x7fde0f9b2be0>