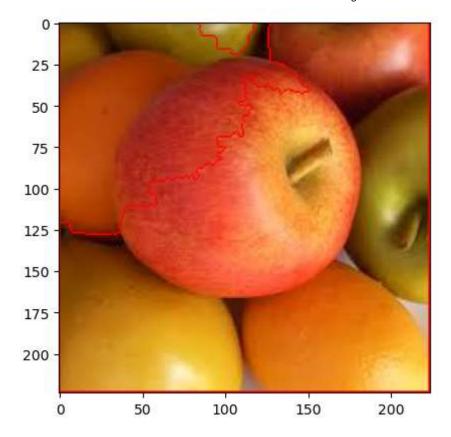
```
In [2]: import cv2
import numpy as np
from matplotlib import pyplot as plt
#load the image
image = cv2.imread("apple.jpg")
gray = cv2.cvtColor(image, cv2.COLOR_BGR2GRAY)
#Apply thresholding to create a binary image
ret, thresh = cv2.threshold(gray, 0, 255, cv2.THRESH BINARY INV + cv2.THRESH OTSU)
#Morphological operations to remove noise
kernel = np.ones((3, 3), np.uint8)
opening = cv2.morphologyEx(thresh, cv2.MORPH_OPEN, kernel, iterations=2)
#Sure background area
sure_bg = cv2.dilate(opening, kernel, iterations=3)
#finding sure foreground area
dist transform = cv2.distanceTransform(opening, cv2.DIST L2, 5)
ret, sure_fg = cv2.threshold(dist_transform, 0.7 * dist_transform.max(), 255, 0)
#finding unknown region
sure fg = np.uint8(sure fg)
unknown = cv2.subtract(sure bg, sure fg)
#Marker labeling
ret, markers = cv2.connectedComponents(sure fg)
markers = markers +1
markers[unknown == 255] = 0
#apply watershed algorithm
markers = cv2.watershed(image, markers)
image[markers == -1] = [0, 0, 255] #Mark watershed boundaries
#Display the result
plt.imshow(cv2.cvtColor(image, cv2.COLOR BGR2RGB))
plt.show()
```



Tn []: