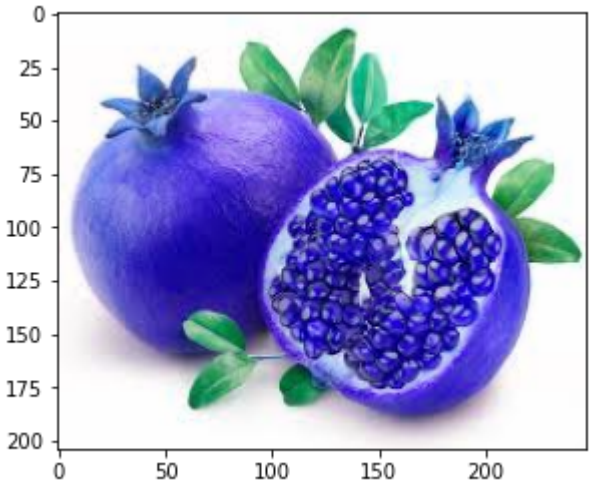
Image segmentation(K Means)

In [8]:
```
import numpy as np
import cv2
import matplotlib.pyplot as plt
```

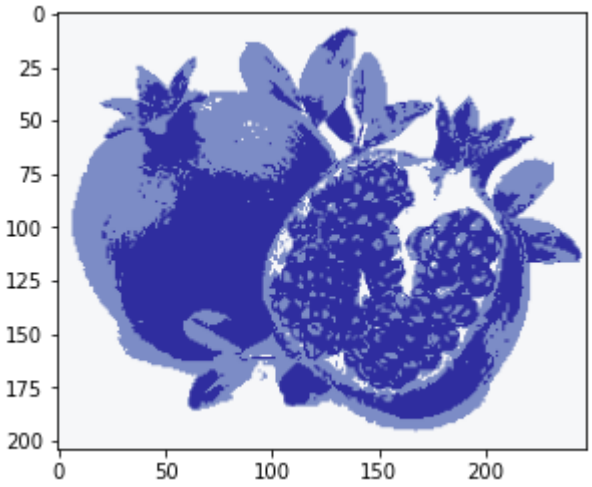
In [10]:
```
# Original image
img = cv2.imread(r'C:\Users\Jaswanth Reddy\Downloads\fruit.jpg')
plt.imshow(img)
```

Out[10]:
```
<matplotlib.image.AxesImage at 0x1973711e550>
```



In [11]:
```
Z = img.reshape((-1,3))

# converting to np.float32
Z = np.float32(Z)

criteria = (cv2.TERM_CRITERIA_EPS + cv2.TERM_CRITERIA_MAX_ITER, 10, 1.0)

# Cluster size of 3
K = 3
ret,label,center=cv2.kmeans(Z,K,None,criteria,10,cv2.KMEANS_RANDOM_CENTERS)

# Converting back into uint8, and making original image
center = np.uint8(center)
res = center[label.flatten()]
res2 = res.reshape((img.shape))
plt.imshow(res2)
```

Out[11]:
```
<matplotlib.image.AxesImage at 0x1973717b250>
```



In [ ]: