import cv2  
import matplotlib.pyplot as plt  
img = cv2.imread('coins.jpg', 0)  
hist = cv2.calcHist([img], [0], None, [256], [0, 256])  
plt.plot(hist)  
plt.xlim([0, 256])  
plt.xlabel('Pixel Intensity')  
plt.ylabel('Frequency')  
plt.title('Histogram of Image')  
plt.show()