

```
from google.colab import files
from IPython.display import Image
uploaded=files.upload()
```

No file chosen
enable

Upload widget is only available when the cell has been executed in the current browser session. Please rerun this cell to

```
import matplotlib.pyplot as plt
import cv2
from google.colab.patches import cv2_imshow

image_path = 'OIP.jpg'

image=cv2.imread(image_path)
cv2_imshow(image)
```



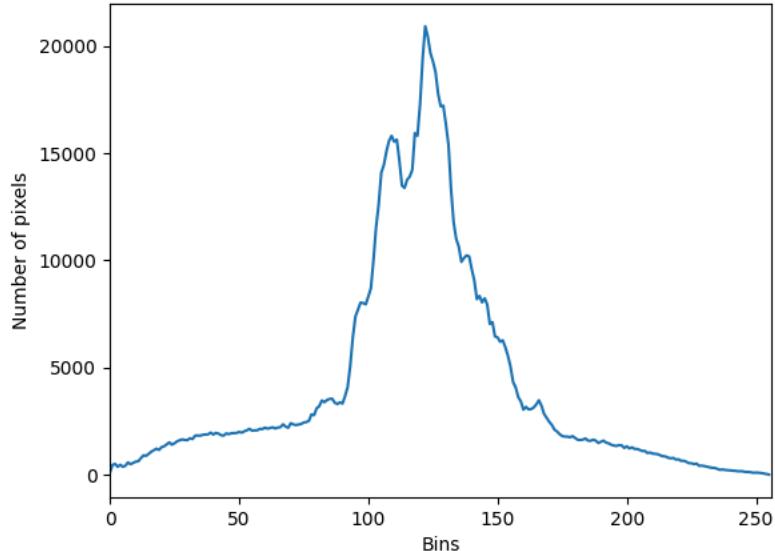
```
gray = cv2.cvtColor(image, cv2.COLOR_BGR2GRAY)
```

```
cv2.imshow(gray)
```



```
hist=cv2.calcHist([gray],[0],None,[256],[0,256])
plt.figure()
plt.title("Grayscale Histogram")
plt.xlabel("Bins")
plt.ylabel("Number of pixels")
plt.plot(hist)
plt.xlim([0,256])
plt.show()
```


Grayscale Histogram



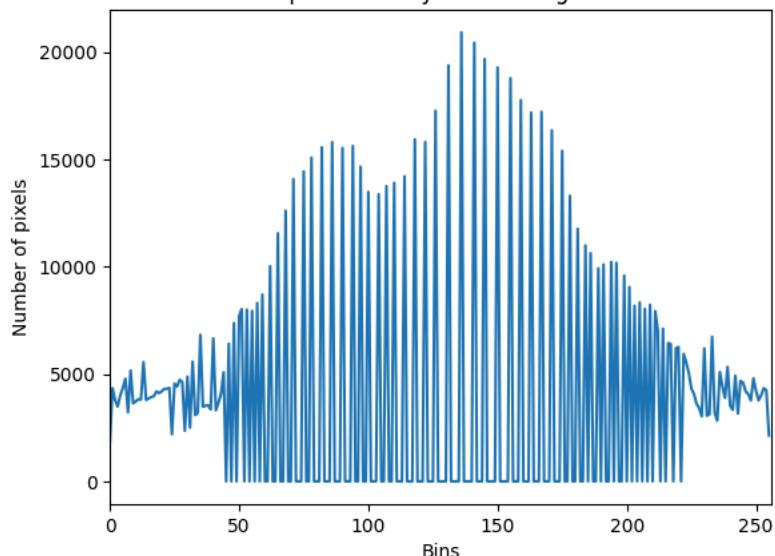
```
eq_hist=cv2.equalizeHist(gray)

hist2=cv2.calcHist([eq_hist],[0],None,[256],[0,256])

plt.figure()
plt.title("Equalized Grayscale Histogram")
plt.xlabel("Bins")
plt.ylabel("Number of pixels")
plt.plot(hist2)
plt.xlim([0,256])
plt.show()
```



Equalized Grayscale Histogram



```
cv2_imshow(gray)
```



```
cv2_imshow(eq_hist)
```

