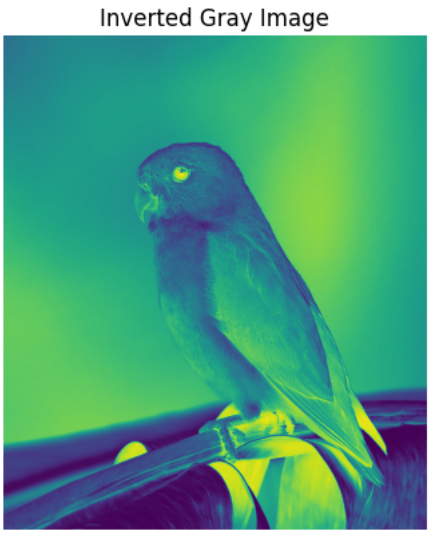
```
# import the library
import cv2
import matplotlib.pyplot as plt


# read the image
img_file = '/content/pexels-roshan-kamath-1661179.jpg'
original_image = cv2.imread(img_file)


# conver the image to rgb
original_img_rgb = cv2.cvtColor(original_image, cv2.COLOR_BGR2RGB)


# display the original image
plt.imshow(original_img_rgb)
plt.axis('off')
plt.title('Original Image')
plt.show()
```


```
#convert the image to gray scale
gray_image = cv2.cvtColor(original_image, cv2.COLOR_BGR2GRAY)


# display the gray image
plt.imshow(gray_image)
plt.axis('off')
plt.title('Gray Image')
plt.show()
```


```
# inver the grayscale image
inverted_grey_image = cv2.bitwise_not(gray_image)
```

```
# display the inverted gray image
plt.imshow(inverted_grey_image)
plt.axis('off')
plt.title('Inverted Gray Image')
plt.show()
```

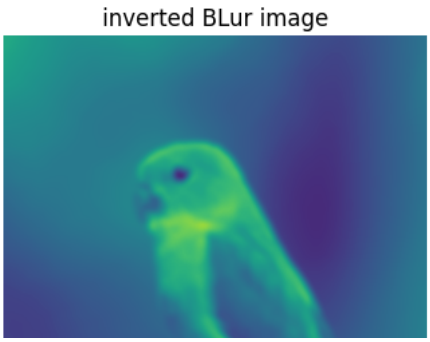



```
# blur the inverted gray image using gaussian blur image
blurred_image = cv2.GaussianBlur(inverted_grey_image, (111, 111), 0)
```

```
# display the GaussianBLur image
plt.imshow(blurred_image)
plt.axis('off')
plt.title('GaussianBLur image')
plt.show()
```


```
# inver the GaussianBlur image
inverted_blurred_image = cv2.bitwise_not(blurred_image)
```

```
# display the inverted BLur image
plt.imshow(inverted_blurred_image)
plt.axis('off')
plt.title('inverted BLur image')
plt.show()
```




```
# create the pencil sketch
pencil_sketch = cv2.divide(gray_image, inverted_blurred_image, scale = 256.0)
```



```
plt.imshow(pencil_sketch)
plt.axis('off')
plt.show()
```

```
#convert the image into gray
pencil_sketch_gray = cv2.cvtColor(pencil_sketch, cv2.COLOR_GRAY2RGB)


# display the pencil sketch
plt.imshow(pencil_sketch_gray)
plt.axis('off')
plt.title('Pencil Sketch')
plt.show()
```