

✓ Activity 1 : Edge Detection using OpenCV

```
import cv2
import numpy as np
from google.colab.patches import cv2_imshow

# Load the image
image = cv2.imread('/content/download.jpg')

# Apply Canny edge detection
edges = cv2.Canny(image, 50, 150)

# Display the original image
cv2_imshow(image)

# Display the image with edges
cv2_imshow(edges)
```



✓ Activity 2: Image Blurring using OpenCV

```
import cv2
import numpy as np
from google.colab.patches import cv2_imshow

# Load the image
image = cv2.imread('/content/download.jpg')

# Display the original image
cv2_imshow(image)

sharpening_kernel = np.array([[ -1, -1, -1],
                              [ -1,  9, -1],
                              [ -1, -1, -1]])

# Apply Gaussian blur
blurred_gaussian = cv2.GaussianBlur(image, (5, 5), 6)
cv2_imshow( blurred_gaussian)

sharpened_image = cv2.filter2D(blurred_gaussian, -1, sharpening_kernel)
cv2_imshow(sharpened_image)

# Apply Median blur
blurred_median = cv2.medianBlur(image, 25)
cv2_imshow(blurred_median)
```

