

# Image edge detection

## Image edge detection

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## 1. Implementation principle

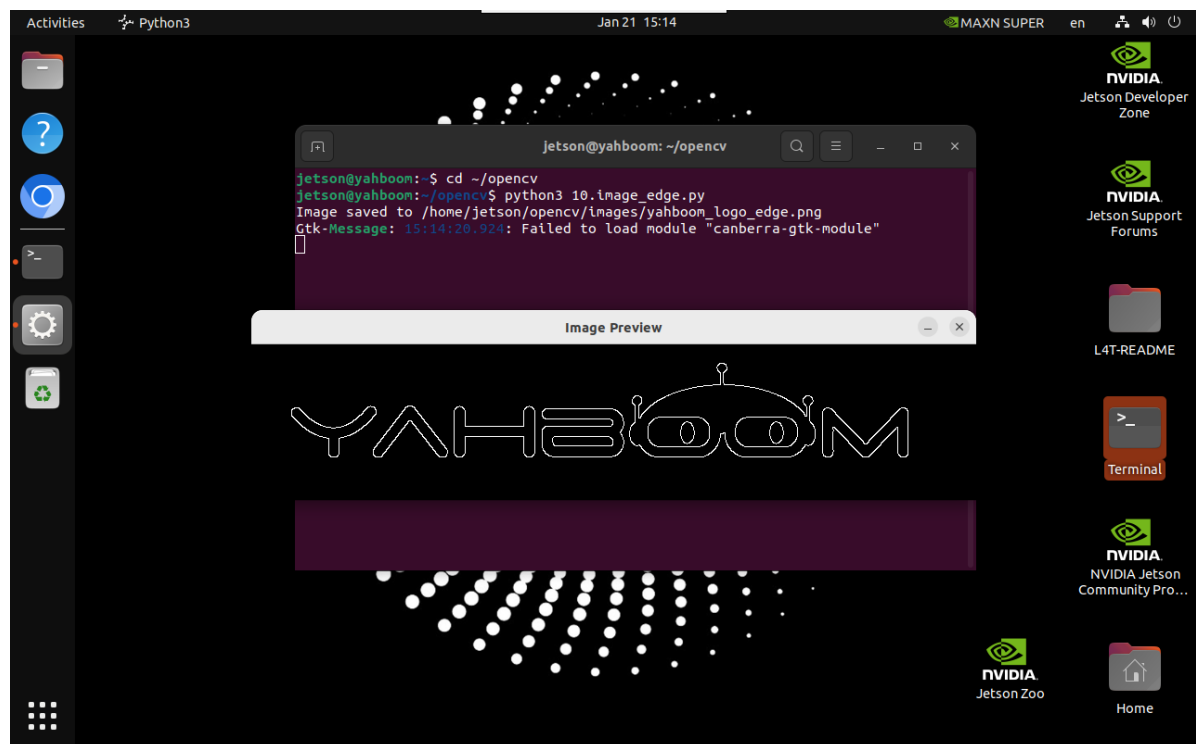
Use `cv2.Canny()` function to detect the edge of the image.

## 2. Implementation effect

```
cd ~/opencv
```

```
python3 10.image_edge.py
```

Note: Select the image and press `q` to exit the program!



## 3. Implementation code

```
import cv2

def edge_detection(input_path, output_path, threshold1, threshold2):
    image = cv2.imread(input_path, cv2.IMREAD_GRAYSCALE)
    if image is None:
        print("Error: Unable to open image file.")
        return
    edges = cv2.Canny(image, threshold1, threshold2)
```

```
if cv2.imwrite(output_path, edges):
    print(f"Image saved to {output_path}")
    cv2.imshow('Image Preview', cv2.imread(output_path))
    cv2.waitKey(0)
    cv2.destroyAllWindows()
else:
    print("Error: Unable to save image file.")

edge_detection('/home/jetson/opencv/images/yahboom_logo.png', \
               '/home/jetson/opencv/images/yahboom_logo_edge.png', \
               100, 200)
```