

# Preview USB camera image

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## 1. Implementation principle

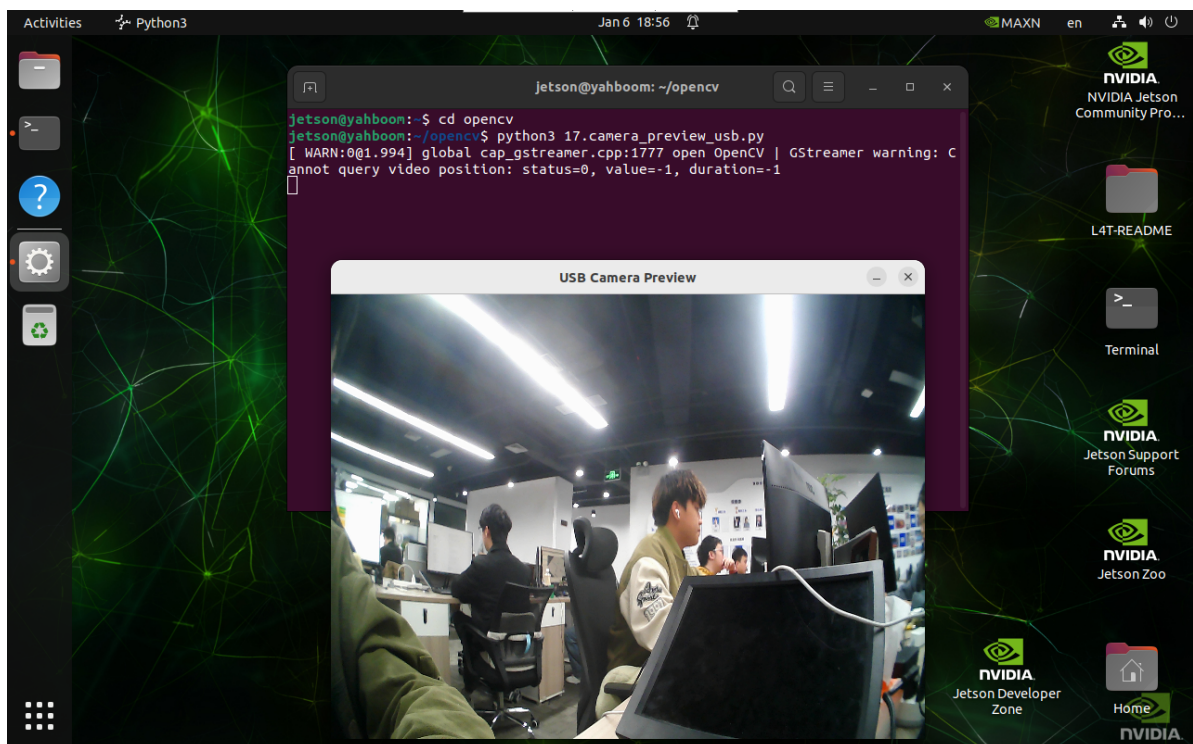
Use `cv2.VideoCapture()` function to capture video from USB camera or video file.

## 2. Implementation effect

```
cd ~/opencv
```

```
python3 17.camera_preview_usb.py # The program opens video0 by default, open  
other cameras and modify the device number by yourself
```

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



## 3. Implementation code

```
import cv2

def preview_usb_camera():
    cap = cv2.VideoCapture(0)
    if not cap.isOpened():
        print("Error: Could not open USB camera.")
        return
```

```
while True:
    ret, frame = cap.read()
    if not ret:
        break

    cv2.imshow('USB Camera Preview', cv2.resize(frame, (640, 480)))
    if cv2.waitKey(1) & 0xFF == ord('q'):
        break

cap.release()
cv2.destroyAllWindows()

preview_usb_camera()
```