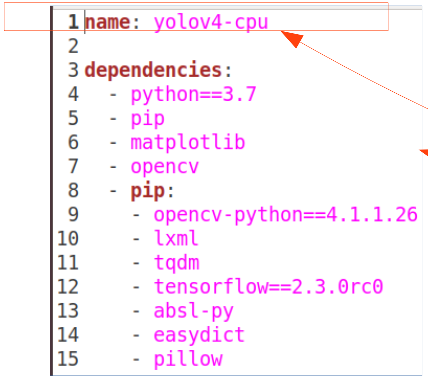
Running OpenCV with Conda Environment

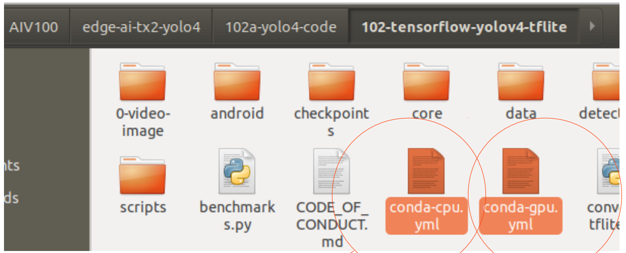
Step 1. Create configuration file .yml for CPU and GPU version

conda-cpu.yml

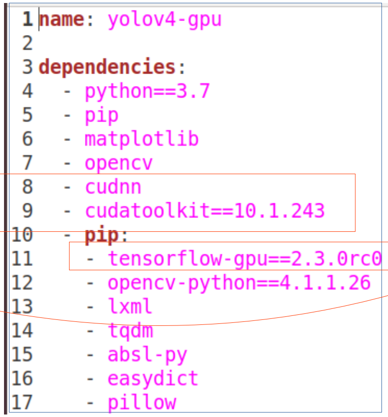


```
name: yolov4-cpu

dependencies:
  - python==3.7
  - pip
  - matplotlib
  - opencv
  - pip:
    - opencv-python==4.1.1.26
    - lxml
    - tqdm
    - tensorflow==2.3.0rc0
    - absl-py
    - easydict
    - pillow
```



conda-gpu.yml



```
name: yolov4-gpu

dependencies:
  - python==3.7
  - pip
  - matplotlib
  - opencv
  - cudnn
  - cudatoolkit==10.1.243
  - pip:
    - tensorflow-gpu==2.3.0rc0
    - opencv-python==4.1.1.26
    - lxml
    - tqdm
    - absl-py
    - easydict
    - pillow
```

conda-cpu.yml

```
name: yolov4-cpu

dependencies:
  - python==3.7
  - pip
  - matplotlib
  - opencv
  - pip:
    - opencv-python==4.1.1.26
    - lxml
    - tqdm
    - tensorflow==2.3.0rc0
    - absl-py
    - easydict
    - pillow
```

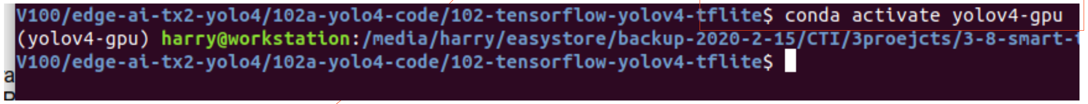
Name of the environment to be created

Step 2. Configure/create the environment in the folder you will run your openCV program by

```
$conda env create -f conda-cpu.yml        #for CPU
$conda env create -f conda-gpu.yml        #for GPU
```

Step 3. Activate the environment with the name that you have created by

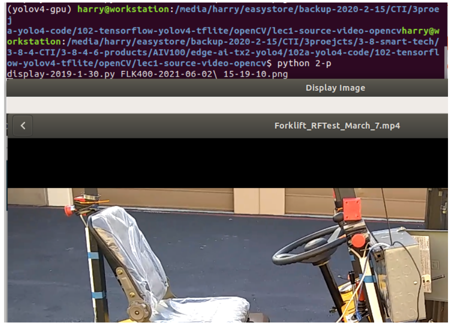
```
$  conda activate yolov4-cpu  #for CPU
$  conda activate yolov4-gpu  #for GPU
```



```
V100/edge-ai-tx2-yolo4/102a-yolo4-code/102-tensorflow-yolov4-tflite$ conda activate yolov4-gpu
(yolov4-gpu) harry@workstation:/media/harry/easystore/backup-2020-2-15/CTI/3proejcts/3-8-smart-t
V100/edge-ai-tx2-yolo4/102a-yolo4-code/102-tensorflow-yolov4-tflite$ 
```

Step 4. Now run your Python OpenCV program

$python myOpenCV.py image.png



```
(yolov4-gpu) harry@workstation:/media/harry/easystore/backup-2020-2-15/CTI/3proe
j
a-yolo4-code/102-tensorflow-yolov4-tflite/openCV/lec1-source-video-opencvharry@w
orkstation:/media/harry/easystore/backup-2020-2-15/CTI/3proejcts/3-8-smart-tech/
3-8-4-CTI/3-8-4-6-products/AIV100/edge-ai-tx2-yolo4/102a-yolo4-code/102-tensorfl
ow-yolov4-tflite/openCV/lec1-source-video-opencv$ python 2-p
display-2019-1-30.py FLK400-2021-06-02\ 15-19-10.png
```