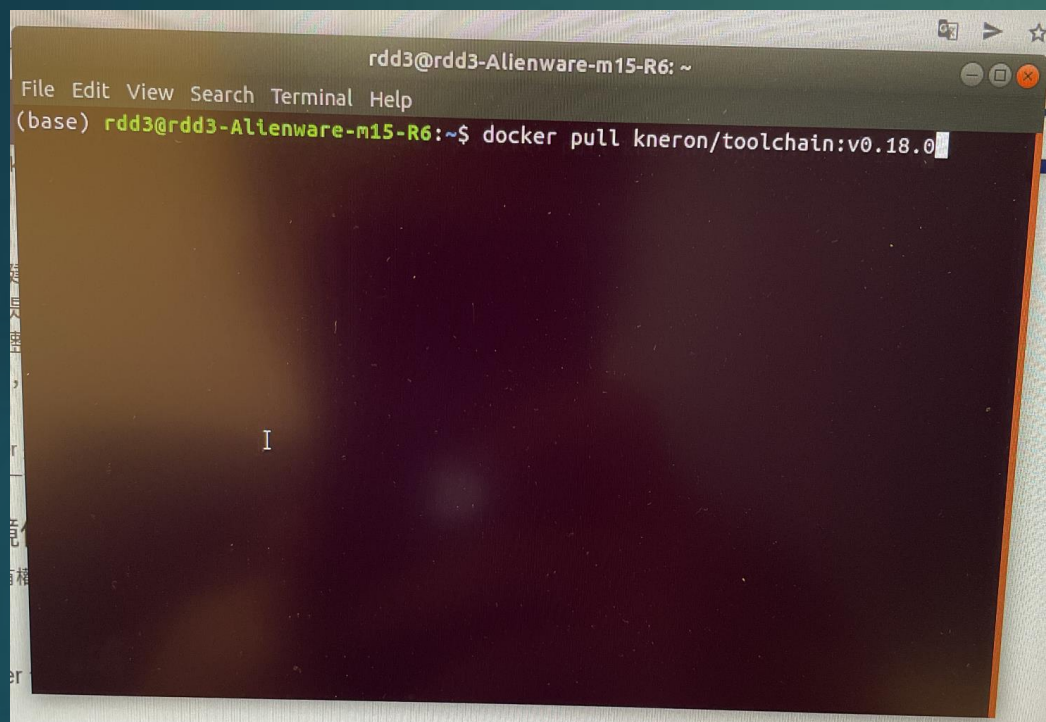
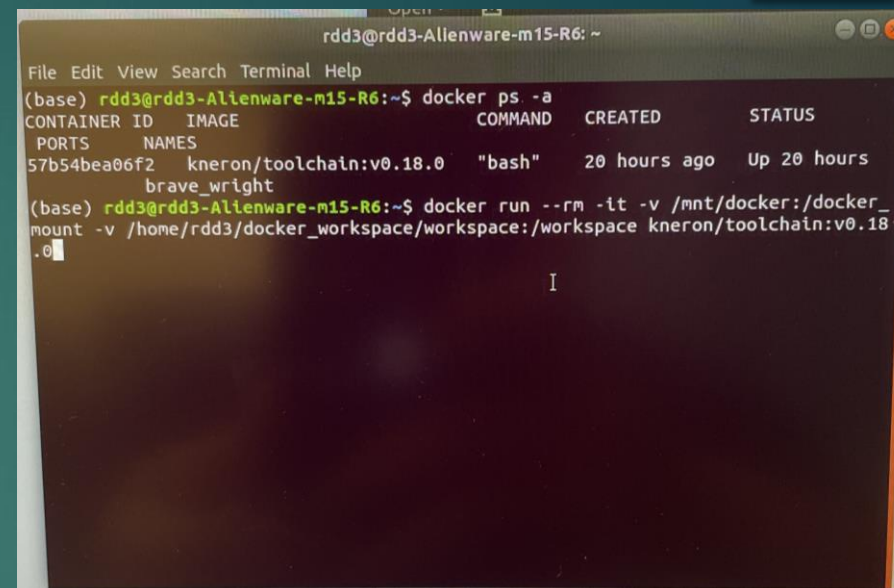


1. 下載kneron-toolchain-v0.18.0

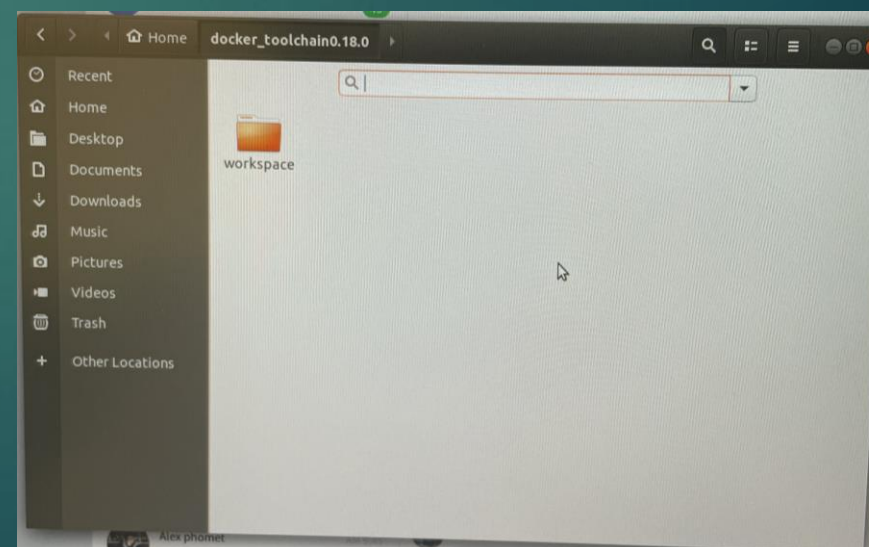


```
rdd3@rdd3-Alienware-m15-R6: ~  
File Edit View Search Terminal Help  
(base) rdd3@rdd3-Alienware-m15-R6:~$ docker pull kneron/toolchain:v0.18.0
```

2. 進入到docker環境底下，並將workspace資料夾與本機做連結



```
rdd3@rdd3-Alienware-m15-R6: ~  
File Edit View Search Terminal Help  
(base) rdd3@rdd3-Alienware-m15-R6:~$ docker ps -a  
CONTAINER ID   IMAGE                                COMMAND                  CREATED        STATUS  
57b54bea06f2   kneron/toolchain:v0.18.0           "bash"                  20 hours ago   Up 20 hours  
brave_wright  
(base) rdd3@rdd3-Alienware-m15-R6:~$ docker run --rm -it -v /mnt/docker:/docker_  
mount -v /home/rdd3/docker_workspace/workspace:/workspace kneron/toolchain:v0.18  
.0
```



3. 進到/workspace/ai_training_regression/litehrnet路徑底下

```
root@8eecaeb37111: /workspace/ai_training/regression/litehrnet
File Edit View Search Terminal Help
with open(args.data) as f:
FileNotFoundError: [Errno 2] No such file or directory: 'yolov5/data/pretrained_paths_720.yaml'
(base) root@8eecaeb37111:/workspace/ai_training/detection/yolov5# python exporting/yolov5_export.py --data yolov5/data/pretrained_paths_720.yaml
Traceback (most recent call last):
  File "exporting/yolov5_export.py", line 73, in <module>
    save_weight(num_classes)
  File "exporting/yolov5_export.py", line 13, in save_weight
    from models.yolo import Model
ModuleNotFoundError: No module named 'models'
(base) root@8eecaeb37111:/workspace/ai_training/detection/yolov5# cd ..
(base) root@8eecaeb37111:/workspace/ai_training/detection# cd ..
bash: cd..: command not found
(base) root@8eecaeb37111:/workspace/ai_training/detection# cd ..
(base) root@8eecaeb37111:/workspace/ai_training# cd ..
(base) root@8eecaeb37111:/workspace# cd ai_training/
(base) root@8eecaeb37111:/workspace/ai_training# cd regression/
(base) root@8eecaeb37111:/workspace/ai_training/regression# cd litehrnet/
(base) root@8eecaeb37111:/workspace/ai_training/regression/litehrnet# cd lite_hrnet/
(base) root@8eecaeb37111:/workspace/ai_training/regression/litehrnet/lite_hrnet# cd ..
(base) root@8eecaeb37111:/workspace/ai_training/regression/litehrnet#
```

4. 輸入指令安裝litehrnet依賴項

```
root@8eecaeb37111: /workspace/ai_training/regression/litehrnet
File Edit View Search Terminal Help
-> see above for output.

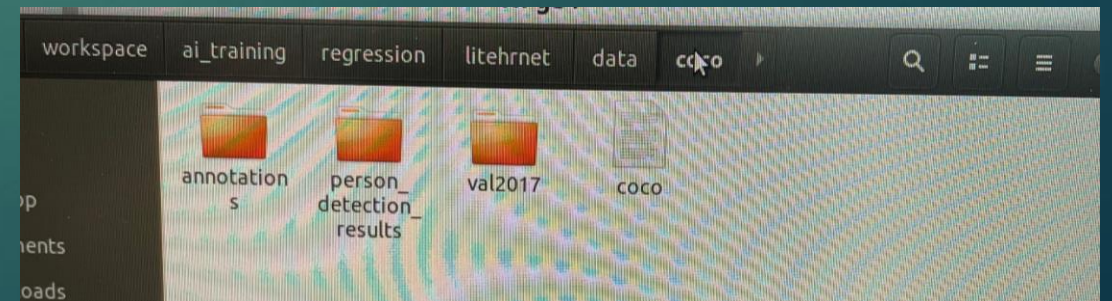
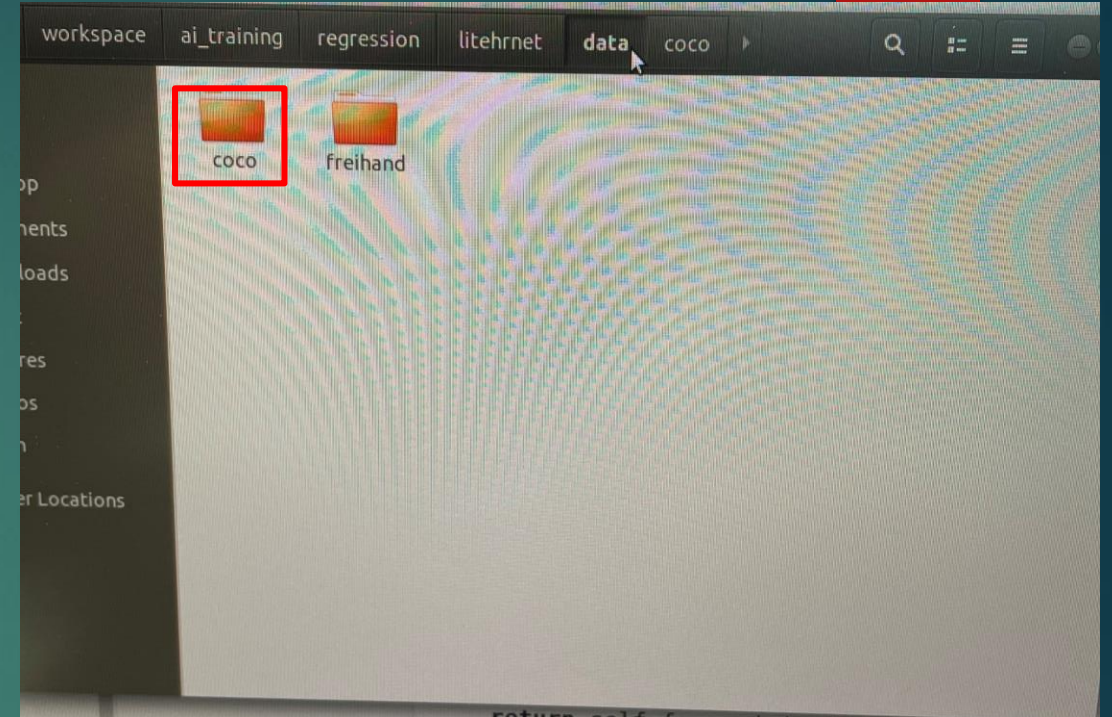
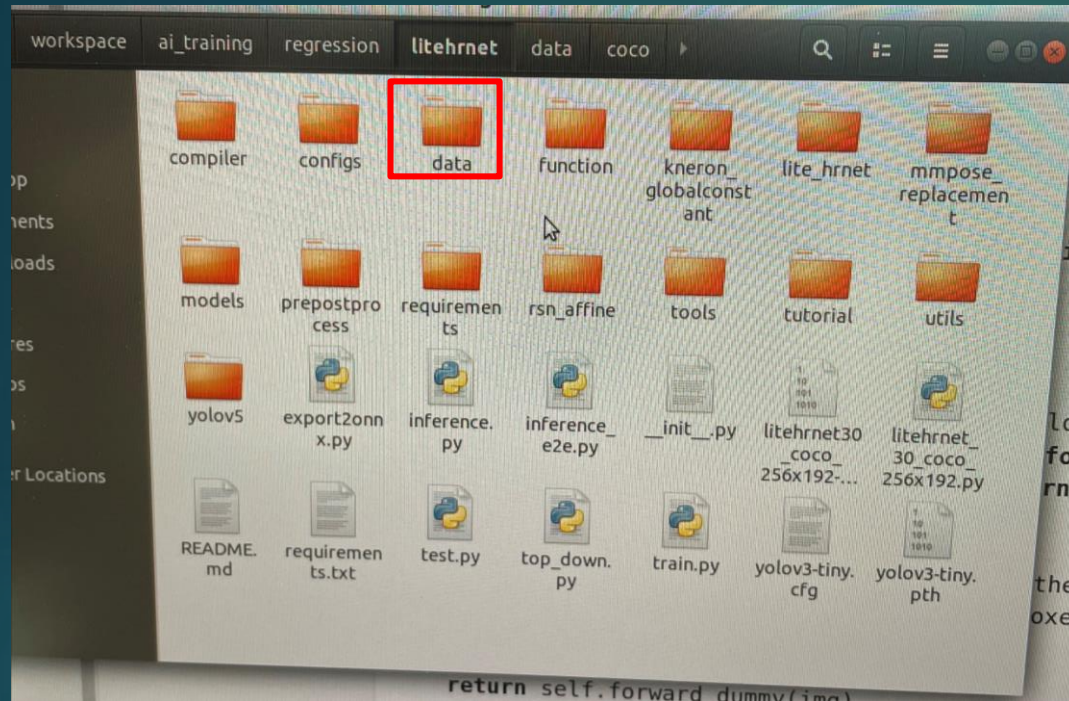
note: This error originates from a subprocess, and is likely not a problem with pip.
(base) root@8eecaeb37111:/workspace/ai_training/regression/litehrnet# pip install -r requirements.txt
Ignoring dataclasses: markers 'python_version == "3.6"' don't match your environment
Collecting poseval@ git+https://github.com/svenkreiss/poseval.git
  Cloning https://github.com/svenkreiss/poseval.git to /tmp/pip-install-kej9y3sm/poseval_15e3a1d454714675b1905ac789f4078d
  Running command git clone --filter=blob:none --quiet https://github.com/svenkreiss/poseval.git /tmp/pip-install-kej9y3sm/poseval_15e3a1d454714675b1905ac789f4078d
  Resolved https://github.com/svenkreiss/poseval.git to commit 3128c5cbcf90946e5164ff438ad651e113e64613
  Running command git submodule update --init--recursive -q
  Preparing metadata (setup.py) ... done
Requirement already satisfied: numpy in /workspace/miniconda/lib/python3.7/site-packages (from -r requirements/build.txt (line 2)) (1.21.6)
Requirement already satisfied: torch>=1.4 in /workspace/miniconda/lib/python3.7/site-packages (from -r requirements/build.txt (line 3)) (1.7.1+cpu)
Requirement already satisfied: torchvision>=0.5.0 in /workspace/miniconda/lib/python3.7/site-packages (from -r requirements/build.txt (line 4)) (0.8.2+cpu)
```


5.輸入指令安裝mmcv-full 1.3.3版

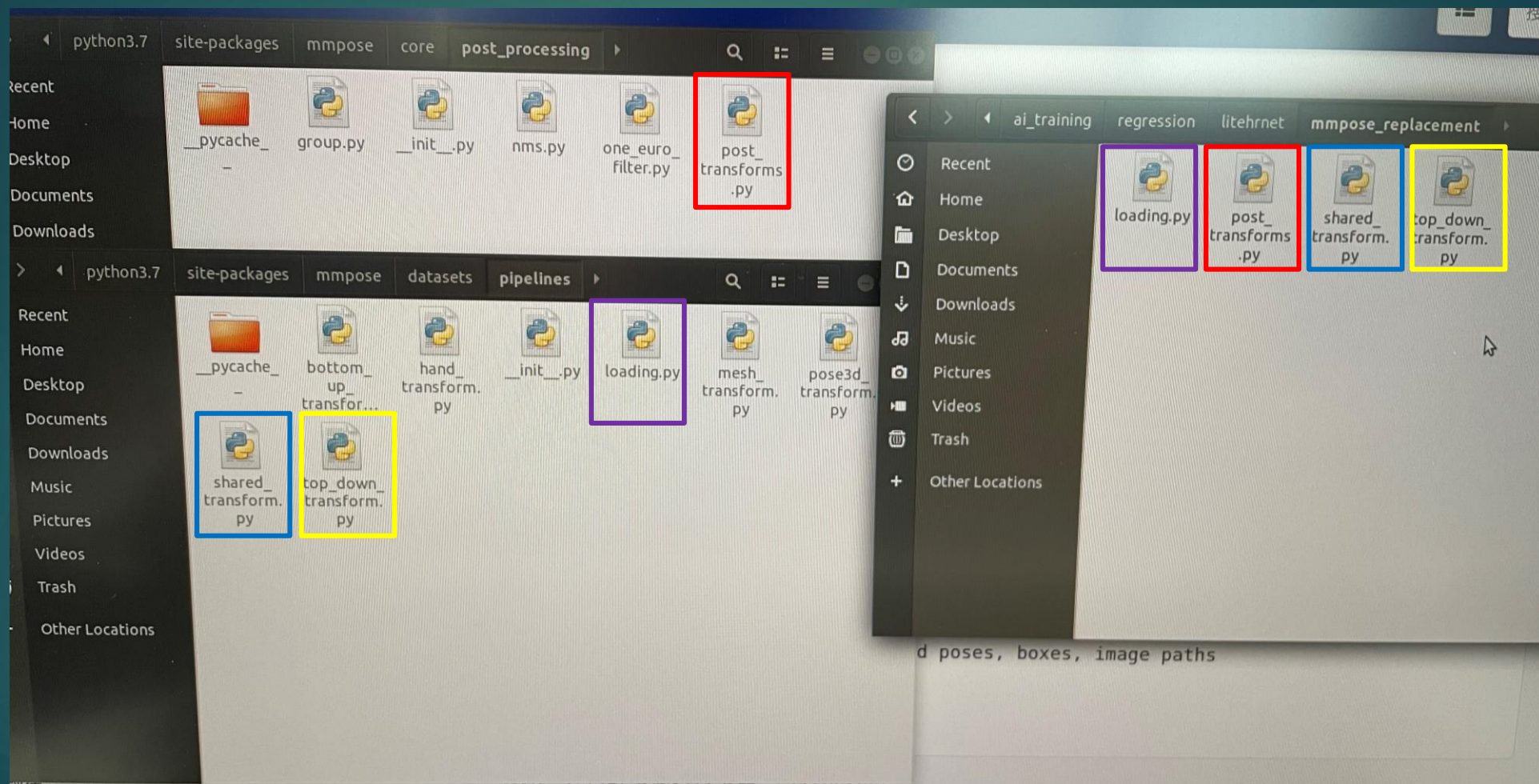
因為在docker裡不能安裝加了cuda的mmcv-full，所以有改指令

```
root@8eecaeb37111: /workspace/ai_training/regression/litehrnet
File Edit View Search Terminal Help
wrap      1.14.1
xdoctest  1.0.0
xmltodict 0.13.0
xtcocotools 1.12
yapf      0.32.0
zinn      2.8.0
(base) root@8eecaeb37111: /workspace/ai_training/regression/litehrnet# pip install mmcv-full==1.3.3
Requirement already satisfied: mmcv-full==1.3.3 in /workspace/miniconda/lib/python3.7/site-packages (1.3.3)
Requirement already satisfied: Pillow in /workspace/miniconda/lib/python3.7/site-packages (from mmcv-full==1.3.3) (8.3.1)
Requirement already satisfied: addict in /workspace/miniconda/lib/python3.7/site-packages (from mmcv-full==1.3.3) (2.4.0)
Requirement already satisfied: yapf in /workspace/miniconda/lib/python3.7/site-packages (from mmcv-full==1.3.3) (0.32.0)
Requirement already satisfied: pyyaml in /workspace/miniconda/lib/python3.7/site-packages (from mmcv-full==1.3.3) (6.0)
Requirement already satisfied: numpy in /workspace/miniconda/lib/python3.7/site-packages (from mmcv-full==1.3.3) (1.21.6)
WARNING: Running pip as the 'root' user can result in broken permissions and conflicting behaviour with the system package manager. It is recommended to use a virtual environment instead: https://pip.pypa.io/warnings/venv
(base) root@8eecaeb37111: /workspace/ai_training/regression/litehrnet#
```

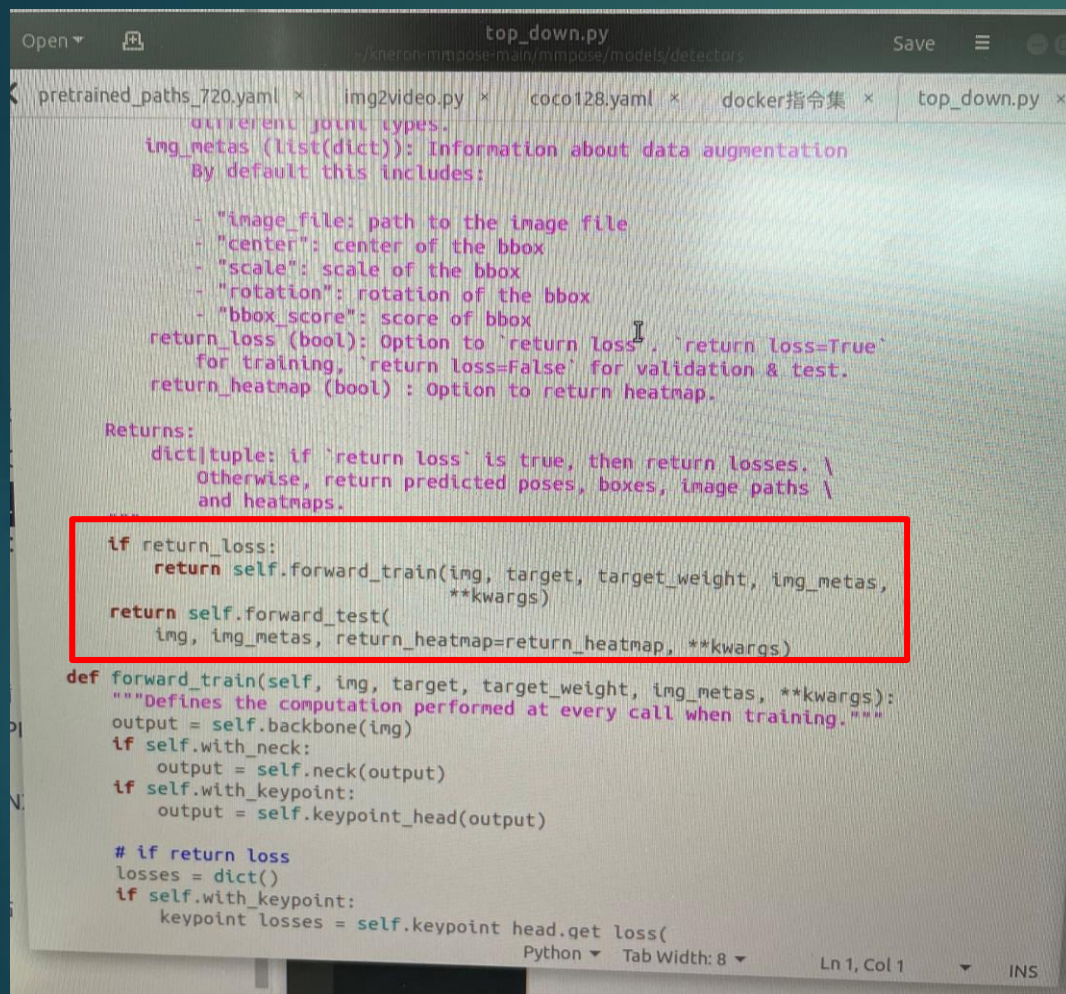
6. 下載coco數據集並存放於官方規定路徑



7. 將litehrnet/mmpose_replacement資料夾裡的4個程式跟
miniconda/lib/python3.7/site-packages/mmpose/dataset/pipelines以及
miniconda/lib/python3.7/site-packages/mmpose/core/post_processing裡面的相對應程式做更換



8. 修改miniconda/lib/python3.7/site-packages/mmpose/models/detectors/top_down.py



```
Open ▾  top_down.py  Save  ⋮
pretrained_paths.720.yaml ×  img2video.py ×  coco128.yaml ×  docker指令集 ×  top_down.py ×

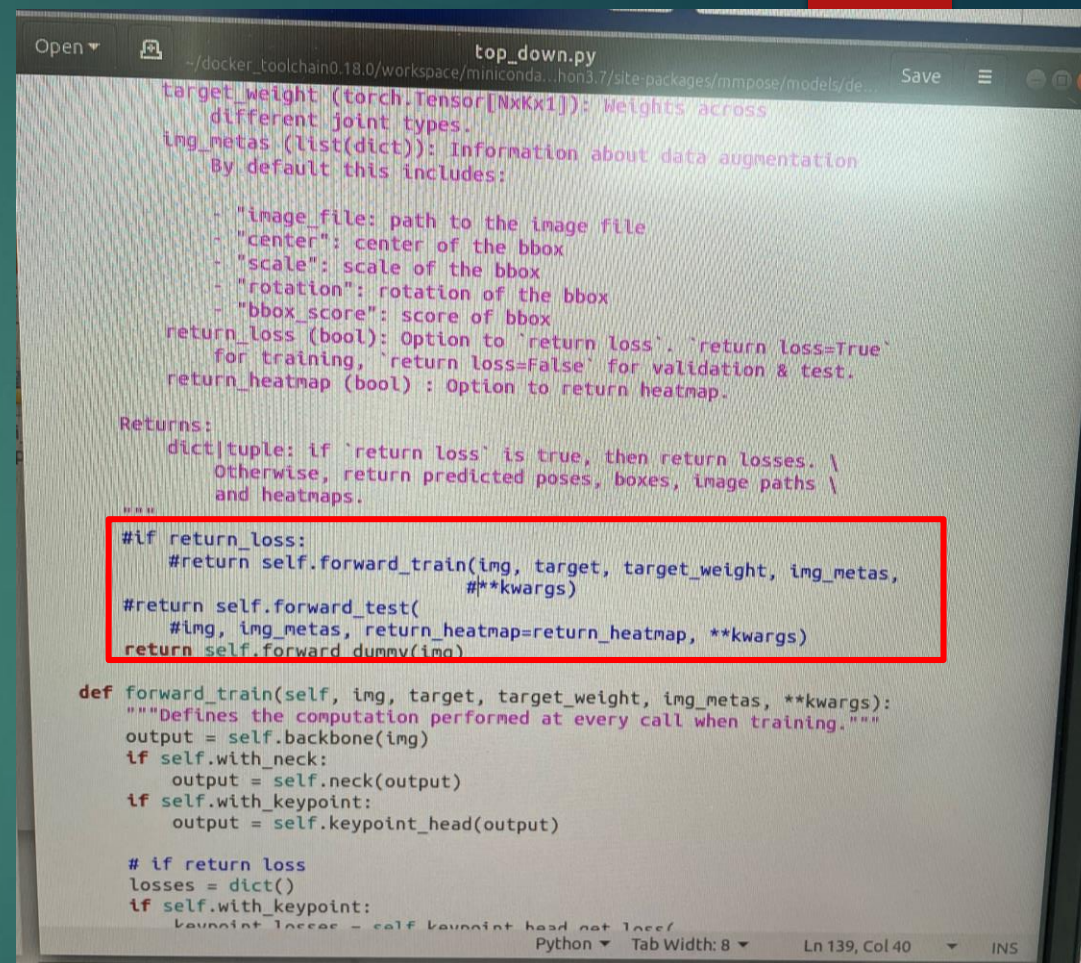
different joint types.
img_metas (list(dict)): Information about data augmentation
By default this includes:
- "image_file": path to the image file
- "center": center of the bbox
- "scale": scale of the bbox
- "rotation": rotation of the bbox
- "bbox_score": score of bbox
return_loss (bool): Option to 'return loss'. 'return loss=True'
for training, 'return loss=False' for validation & test.
return_heatmap (bool) : Option to return heatmap.

Returns:
dict|tuple: if 'return loss' is true, then return losses. \
Otherwise, return predicted poses, boxes, image paths \
and heatmaps.

if return_loss:
    return self.forward_train(img, target, target_weight, img_metas,
                             **kwargs)
return self.forward_test(
    img, img_metas, return_heatmap=return_heatmap, **kwargs)

def forward_train(self, img, target, target_weight, img_metas, **kwargs):
    """Defines the computation performed at every call when training."""
    output = self.backbone(img)
    if self.with_neck:
        output = self.neck(output)
    if self.with_keypoint:
        output = self.keypoint_head(output)

    # if return loss
    losses = dict()
    if self.with_keypoint:
        keypoint_losses = self.keypoint_head.get_loss(
Python ▾  Tab Width: 8 ▾  Ln 1, Col 1 ▾  INS
```



```
Open ▾  top_down.py  Save  ⋮
~/docker_toolchain0.18.0/workspace/miniconda...hon3.7/site-packages/mmpose/models/de...
target_weight (torch.Tensor[NxKx1]): Weights across
different joint types.
img_metas (list(dict)): Information about data augmentation
By default this includes:
- "image_file": path to the image file
- "center": center of the bbox
- "scale": scale of the bbox
- "rotation": rotation of the bbox
- "bbox_score": score of bbox
return_loss (bool): Option to 'return loss'. 'return loss=True'
for training, 'return loss=False' for validation & test.
return_heatmap (bool) : Option to return heatmap.

Returns:
dict|tuple: if 'return loss' is true, then return losses. \
Otherwise, return predicted poses, boxes, image paths \
and heatmaps.

# if return_loss:
#     return self.forward_train(img, target, target_weight, img_metas,
#                             **kwargs)
# return self.forward_test(
#     img, img_metas, return_heatmap=return_heatmap, **kwargs)
return self.forward_dummy(img)

def forward_train(self, img, target, target_weight, img_metas, **kwargs):
    """Defines the computation performed at every call when training."""
    output = self.backbone(img)
    if self.with_neck:
        output = self.neck(output)
    if self.with_keypoint:
        output = self.keypoint_head(output)

    # if return loss
    losses = dict()
    if self.with_keypoint:
        keypoint_losses = self.keypoint_head.get_loss(
Python ▾  Tab Width: 8 ▾  Ln 139, Col 40 ▾  INS
```


9. 執行export2onnx.py code發生錯誤

不知道錯誤原因為何，流程如果有錯，再請您不吝指導我，麻煩您了

```
root@8eecaeb37111: /workspace/ai_training/regression/litehrnet
File Edit View Search Terminal Help
packages (from mmcv-full==1.3.3) (1.21.6)
WARNING: Running pip as the 'root' user can result in broken permissions and con
flicting behaviour with the system package manager. It is recommended to use a v
(base) root@8eecaeb37111: /workspace/ai_training/regression/litehrnet# python exp
ort2onnx.py configs/top_down/lite_hrnet/coco/litehrnet_30_coco_256x192.py litehr
net30_coco_256x192-4176555b_20210626.pth
Traceback (most recent call last):
  File "export2onnx.py", line 11, in <module>
    from models import build_posenet
  File "/workspace/ai_training/regression/litehrnet/models/__init__.py", line 1,
    in <module>
    from .backbones import * # noqa
  File "/workspace/ai_training/regression/litehrnet/models/backbones/__init__.py
", line 1, in <module>
    from .litehrnet_no_shuffle_no_avgpool import LiteHRNet#from .litehrnet_no_sh
uffle_no_se_2 import LiteHRNet #from .litehrnet_no_shuffle_no_se import LiteHRNe
t#from .litehrnet_no_shuffle import LiteHRNet
  File "/workspace/ai_training/regression/litehrnet/models/backbones/litehrnet_n
o_shuffle_no_avgpool.py", line 13, in <module>
    from mmpose.models.registry import BACKBONES
  File "/workspace/miniconda/lib/python3.7/site-packages/mmpose/models/__init__.
py", line 6, in <module>
    from .detectors import * # noqa
  File "/workspace/miniconda/lib/python3.7/site-packages/mmpose/models/detectors
```