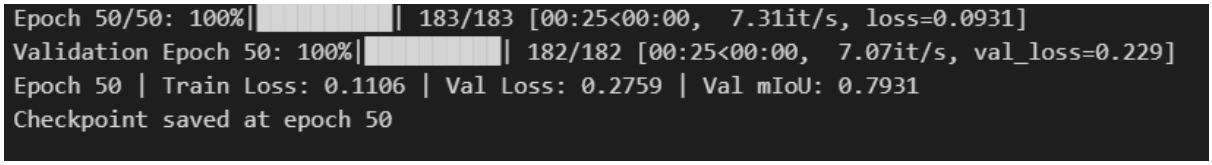
# Report-2

Improving mIoU on the validation set and evaluation on kitti dataset

1.)Increased mIoU from 76 to 79.




Combination tried:

- Dropout
- Combined losses (supportive losses used)
- Tweaking model architecture a bit. Like skip connection addition in Decoder.
- Loss function was changed
- Trained with unfreezing last six layer from the DINO

All of these were somewhere around 74 to 76 mIoU.

2.) What worked?
Along with the above combination removing DINO AutoImage Processor and adding a manual image processor worked and increased the mIoU to 79.3%.

3.) This was achieved on our baseline model, the simple one. The mIoU can further improved by carrying out other Experiments.

4.) Learning Rate, Decay, epoch and optimizer were not Experimented. It could have been further increased.

5.) Notebook named dino_seg_kitto.ipynb is pushed on GitHub along with the Report named Report2.pdf

## Evaluation on KITTI Dataset

On Kitti dataset, I am getting some unusual result. I am suspecting the label of the object is different and the mismatch of the object we have trained

and the object we are evaluating on. Need to analyse once the Kitti dataset how the labels are put there.