

With Learning Rate =  $5e-3$  (0.00005) [10x Larger than Baseline]:

1. Code Changes:

- Changed the learning rate value from  $5e-4$  (baseline) to  $5e-3$  (10x larger than baseline) on line 132:

```
learning_rate = 5e-3 # Learning rate for the optimizer
```

2. Output:

