Homework 11

Experiment 1

- Baseline
- No changes to parameters
- Total number of successful landings 33
- Log file path: HW11/logs/baseline_run
- Video COS url: https://w251-homework3.s3.us-east.cloud-object-storage.appdomain.cloud/frame47000.mp4

Experiment 2

- Updated threshold to 1000
- Set total iterations to 70000
- Total number of successful landings 92
- Significant improvement over Baseline
- Log file path: HW11/logs/first_experiment_run
- Video COS url: https://w251-homework3.s3.us-east.cloud-object-storage.appdomain.cloud/frame70000.mp4

Experiment 3

- Reset threshold to 3000
- Reset iterations to 50000
- Added two layers 64, 128
- Added metrics ‘mse’ to compute mean squared error in addition to accuracy
- Total number of successful landings: 44
- Log file path: HW11/logs/second_experiment_run
- Video COS url: https://w251-homework3.s3.us-east.cloud-object-storage.appdomain.cloud/frame61000.mp4

As observed Experiment 2 produced the best model in terms of the number of landings while Experiment 3 fared marginally better than Baseline.

From the trial and error it appears that increasing the number of iterations provided a significant boost to the landing metric. This

confirms to the expectation the Deep learning models do perform better as the number of iterations increases