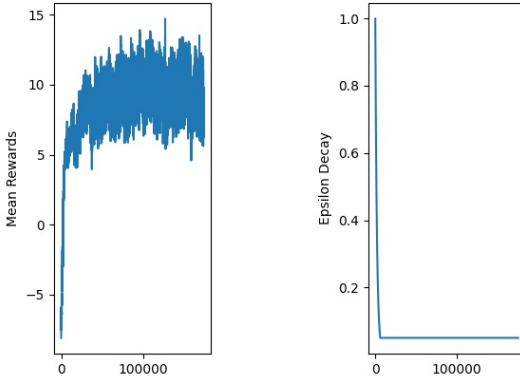


Adam



```
replay_memory_size = 100000
minibatch_size = 64
epsilon_init = 1.0
epsilon_decay = 0.9995
epsilon_min = 0.05
network_sync_rate = 10
learning_rate = 0.001
discount_factor_g = 0.99
```

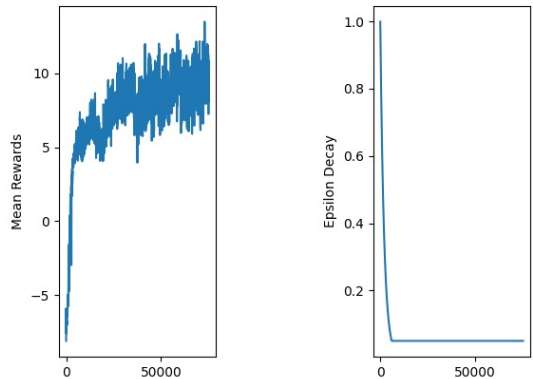
Training Episodes: 93065episode [14:08, 73.98episode/s]Episode: 93064,
Best reward: 125.89999999999766,
Best score: 26
Epsilon: 0.05

Training Episodes: 174744episode [2:10:13, 22.36episode/s]



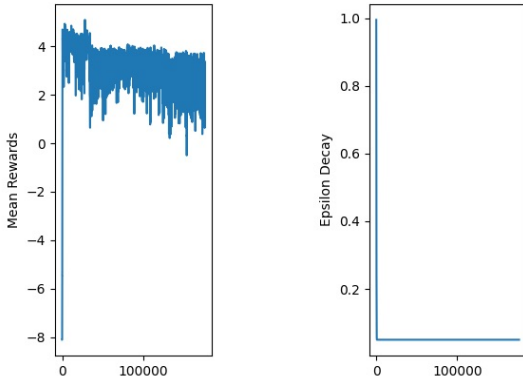
176.531 episodes

Adam



Conclusion: After 1.6h
got stucked

Adam



mini-batch

64 \rightarrow 32

eps-decay

0.9995 \rightarrow 0.9995

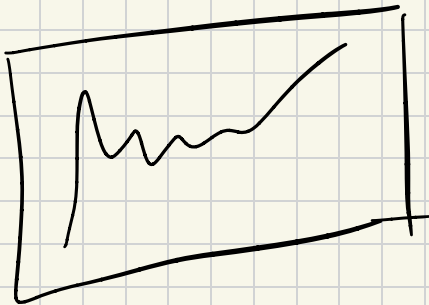
Sync-rate

10 \rightarrow 5

Best-reward

18 \rightarrow 48

All params like above



+

RMS

Best-reward

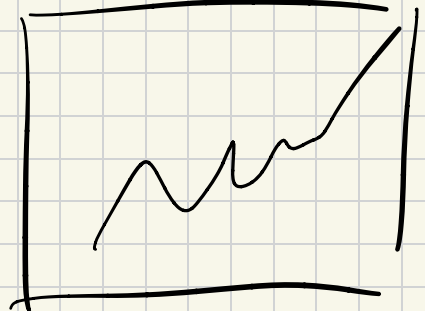
48 \rightarrow 90

eps-decay 0.9995 \rightarrow 0.9995
Sync-rate 5 \rightarrow 10

RMS

Best-reward

90 \rightarrow 116



Game play

Training Episodes: 1episode [00:00, 2.54episode/s]Score: 244 Reward: 1140.8000000000447 ●
Training Episodes: 3episode [00:01, 2.98episode/s]Score: 206 Reward: 964.9000000001187
Training Episodes: 4episode [00:01, 3.06episode/s]Score: 199 Reward: 930.8000000001125
Training Episodes: 5episode [00:01, 3.56episode/s]Score: 128 Reward: 600.9000000000536
Training Episodes: 7episode [00:02, 3.47episode/s]Score: 365 Reward: 1705.2999999996414 ●
Training Episodes: 8episode [00:02, 3.39episode/s]Score: 202 Reward: 944.800000000115
Training Episodes: 9episode [00:02, 2.75episode/s]Score: 353 Reward: 1650.89999999968 ●
Training Episodes: 10episode [00:03, 2.65episode/s]Score: 269 Reward: 1258.8999999996 ●
Training Episodes: 12episode [00:03, 3.06episode/s]Score: 200 Reward: 936.9000000001137
Training Episodes: 14episode [00:04, 2.77episode/s]Score: 365 Reward: 1706.89999999964 ●
Training Episodes: 16episode [00:05, 3.65episode/s]Score: 116 Reward: 544.9000000000436
Training Episodes: 18episode [00:05, 5.84episode/s]Score: 41 Reward: 194.8999999999458
Training Episodes: 20episode [00:05, 5.84episode/s]Score: 176 Reward: 824.9000000000937