# Reinforcement Learning: DQN

- As before, please keep the names of the layer consistent with what is requested in model.py. Otherwise the test functions will not work

- You will need to fill in the model.py, DQN.py, replay_buffer.py, and env_wrapper.py.

To avoid pain with installation and model training, please use Colab for this project. DO NOT use Windows for this project. If you use Mac, there might be some potential test case failures you need to address with extra effort.

## Set up

```
In [ ]:  # !git clone https://github.com/kbaseba/239AS_2.git
```

```
Cloning into '239AS_2'...
remote: Enumerating objects: 360, done.
remote: Total 360 (delta 0), reused 0 (delta 0), pack-reused 360 (from 2)
Receiving objects: 100% (360/360), 865.41 MiB | 15.48 MiB/s, done.
Resolving deltas: 100% (114/114), done.
Updating files: 100% (163/163), done.
```

```
In [ ]:  # mount it if you use Colab
         # from google.colab import drive
         # drive.mount('/content/drive')
```

```
Mounted at /content/drive
```

```
In [ ]:  # TODO: change the dir to your folder
         # %cd /content/239AS_2/Project_4/
```

```
/content/239AS_2/Project_4
```

```
In [1]:  %load_ext autoreload
         %autoreload 2
```

```
In [2]:  !pip install numpy torch wandb swig matplotlib termcolor
         !pip install gymnasium
         !pip install gymnasium[box2d]
```

```
Requirement already satisfied: numpy in /home/tilboon/Documents/239AS_2/.con
da/lib/python3.11/site-packages (2.2.6)
Requirement already satisfied: torch in /home/tilboon/Documents/239AS_2/.con
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Requirement already satisfied: wandb in /home/tilboon/Documents/239AS_2/.con
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a/lib/python3.11/site-packages (4.3.1)
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2/.conda/lib/python3.11/site-packages (3.10.3)
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2/.conda/lib/python3.11/site-packages (3.1.0)
Requirement already satisfied: filelock in /home/tilboon/Documents/239AS_2/.
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cuments/239AS_2/.conda/lib/python3.11/site-packages (from torch) (4.14.0)
Requirement already satisfied: sympy>=1.13.3 in /home/tilboon/Documents/239A
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Requirement already satisfied: nvidia-cuda-nvrtc-cu12==12.6.77 in /home/tilb
oon/Documents/239AS_2/.conda/lib/python3.11/site-packages (from torch) (12.
6.77)
Requirement already satisfied: nvidia-cuda-runtime-cu12==12.6.77 in /home/ti
lboon/Documents/239AS_2/.conda/lib/python3.11/site-packages (from torch) (1
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oon/Documents/239AS_2/.conda/lib/python3.11/site-packages (from torch) (12.
6.80)
Requirement already satisfied: nvidia-cudnn-cu12==9.5.1.17 in /home/tilboon/
Documents/239AS_2/.conda/lib/python3.11/site-packages (from torch) (9.5.1.1
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Requirement already satisfied: nvidia-cublas-cu12==12.6.4.1 in /home/tilboo
n/Documents/239AS_2/.conda/lib/python3.11/site-packages (from torch) (12.6.
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on/Documents/239AS_2/.conda/lib/python3.11/site-packages (from torch) (11.7.
1.2)
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```

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cuments/239AS_2/.conda/lib/python3.11/site-packages (from torch) (12.6.77)
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8.1.1)
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s/239AS_2/.conda/lib/python3.11/site-packages (from wandb) (8.2.1)
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cuments/239AS_2/.conda/lib/python3.11/site-packages (from wandb) (3.1.44)
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2/.conda/lib/python3.11/site-packages (from wandb) (25.0)
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_2/.conda/lib/python3.11/site-packages (from wandb) (4.3.8)
Requirement already satisfied: protobuf!=4.21.0,!=5.28.0,<7,>=3.19.0 in /hom
e/tilboon/Documents/239AS_2/.conda/lib/python3.11/site-packages (from wandb)
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s/239AS_2/.conda/lib/python3.11/site-packages (from wandb) (2.32.3)
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_2/.conda/lib/python3.11/site-packages (from wandb) (1.3.6)
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(0.7.0)
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33.2)
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uments/239AS_2/.conda/lib/python3.11/site-packages (from pydantic<3->wandb)
(0.4.1)
Requirement already satisfied: charset-normalizer<4,>=2 in /home/tilboon/Doc
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Requirement already satisfied: idna<4,>=2.5 in /home/tilboon/Documents/239AS
_2/.conda/lib/python3.11/site-packages (from requests<3,>=2.0.0->wandb) (3.1
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s/239AS_2/.conda/lib/python3.11/site-packages (from requests<3,>=2.0.0->wand
b) (2025.4.26)
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Requirement already satisfied: contourpy>=1.0.1 in /home/tilboon/Documents/2
39AS_2/.conda/lib/python3.11/site-packages (from matplotlib) (1.3.2)
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_2/.conda/lib/python3.11/site-packages (from matplotlib) (0.12.1)
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ts/239AS_2/.conda/lib/python3.11/site-packages (from matplotlib) (2.9.0.post
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9AS_2/.conda/lib/python3.11/site-packages (from gitpython!=3.1.29,>=1.0.0->w
andb) (4.0.12)
Requirement already satisfied: smmap<6,>=3.0.1 in /home/tilboon/Documents/23
9AS_2/.conda/lib/python3.11/site-packages (from gitdb<5,>=4.0.1->gitpython!=
3.1.29,>=1.0.0->wandb) (5.0.2)
Requirement already satisfied: six>=1.5 in /home/tilboon/Documents/239AS_2/.
conda/lib/python3.11/site-packages (from python-dateutil>=2.7->matplotlib)
(1.17.0)
Requirement already satisfied: mpmath<1.4,>=1.1.0 in /home/tilboon/Document
s/239AS_2/.conda/lib/python3.11/site-packages (from sympy>=1.13.3->torch)
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Requirement already satisfied: MarkupSafe>=2.0 in /home/tilboon/Documents/23
9AS_2/.conda/lib/python3.11/site-packages (from jinja2->torch) (3.0.2)
Requirement already satisfied: gymnasium in /home/tilboon/Documents/239AS_
2/.conda/lib/python3.11/site-packages (1.1.1)
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39AS_2/.conda/lib/python3.11/site-packages (1.1.1)
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S_2/.conda/lib/python3.11/site-packages (from gymnasium[box2d]) (2.2.6)
Requirement already satisfied: cloudpickle>=1.2.0 in /home/tilboon/Document
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(4.14.0)
Requirement already satisfied: farama-notifications>=0.0.1 in /home/tilboon/
Documents/239AS_2/.conda/lib/python3.11/site-packages (from gymnasium[box2
d]) (0.0.4)
Requirement already satisfied: box2d-py==2.3.5 in /home/tilboon/Documents/23
9AS_2/.conda/lib/python3.11/site-packages (from gymnasium[box2d]) (2.3.5)
Requirement already satisfied: pygame>=2.1.3 in /home/tilboon/Documents/239A
```

```
S_2/.conda/lib/python3.11/site-packages (from gymnasium[box2d]) (2.6.1)
Requirement already satisfied: swig==4.* in /home/tilboon/Documents/239AS_
2/.conda/lib/python3.11/site-packages (from gymnasium[box2d]) (4.3.1)
```

In [2]:
```python
import rl_test
from utils import *
```

# Introduction to the Enviroment (5 points)

We will be training a DQN agent to play the game of CarRacing. The agent will be trained to play the game using the pixels of the game as an input. The reward structure is as follows for each frame:

- -0.1 for each frame
- +1000/N where N is the number of tiles visited by the car in the episode

The overall goal of this game is to design a agent that is able to play the game with a average test score of above 600. In discrete mode the actions can take 5 actions,

- 0: Do Nothing
- 1: Turn Left
- 2: Turn Right
- 3: Accelerate
- 4: Brake

First let us visualize the game and understand the environment.

In [3]:
```python
import gymnasium as gym
import numpy as np
env = gym.make('CarRacing-v3', continuous=False, render_mode='rgb_array')
env.np_random = np.random.RandomState(42)
```

In [13]:
```python
from IPython.display import HTML

frames = []
s, _ = env.reset()

while True:
    a = env.action_space.sample()
    s, r, terminated, truncated, _ = env.step(a)
    frames.append(s)
    if terminated or truncated:
        break

anim = animate(frames)
HTML(anim.to_jshtml())
```
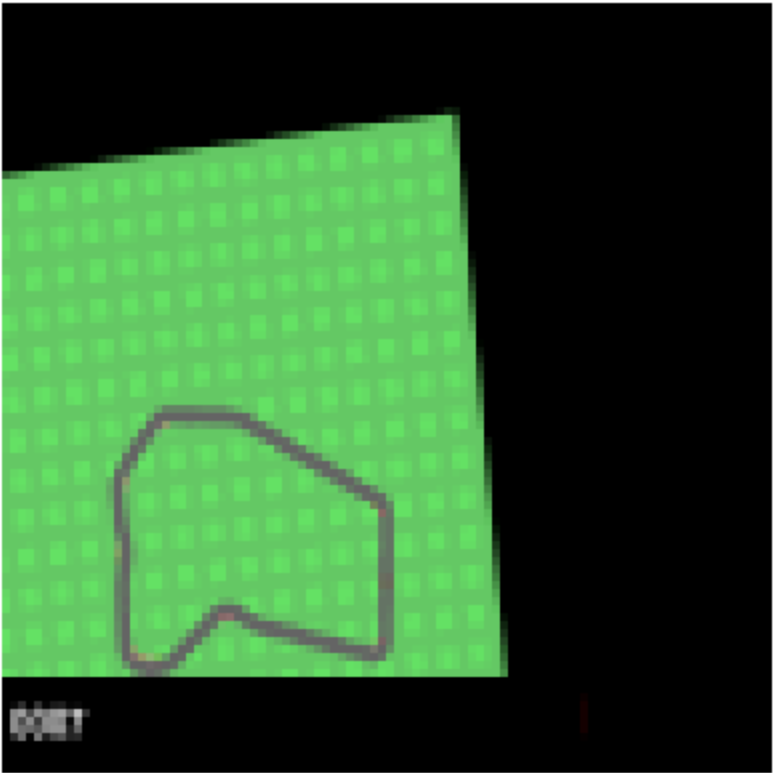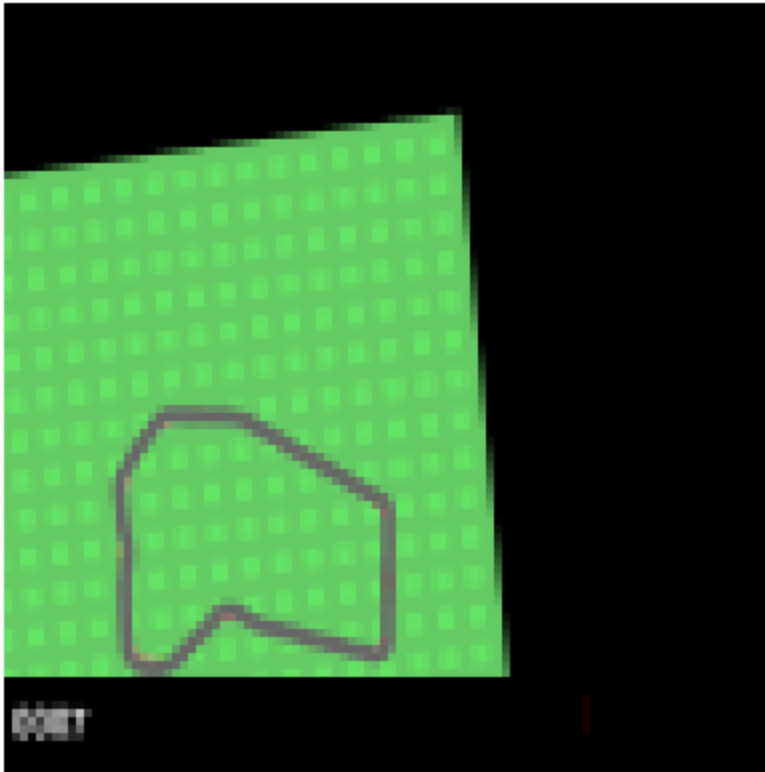
So a couple things we can note:

- at the beginning of the game, we have 50 frames of the game slowly zooming into the car, we should ignore this period, ie no-op during this period.
- there is a black bar at the bottom of the screen, we should crop this out of the observation.

In addition, another thing to note is that the current frame doesn't give much information about the velocity and acceleration of the car, and that the car does not move much for each frame.

## Environment Wrapper (5 points)

As a result, you will need to complete `EnvWrapper` in `env_wrapper.py`. You can find more information in the docstring for the wrapper, however the main idea is that it is a wrapper to the environment that does the following:

- skips the first 50 frames of the game
- crops out the black bar and reshapes the observation to a 84x84 image, as well as turning the resulting image to grayscale
- performs the actions for `skip_frames` frames
- stacks the last `num_frames` frames together to give the agent some information about the velocity and acceleration of the car.

```
In [4]:  from env_wrapper import EnvWrapper

         rl_test.test_wrapper(EnvWrapper)
```

Passed reset
Passed step

# DQN (25 points)

## CNN Model (5 points)

Now we are ready to build the model. Our architecture of the CNN model is the one proposed by Mnih et al in "Human-level control through deep reinforcement learning". Specifically this consists of the following layers:

- A convolutional layer with 32 filters of size 8x8 with stride 4 and relu activation
- A convolutional layer with 64 filters of size 4x4 with stride 2 and relu activation
- A convolutional layer with 64 filters of size 3x3 with stride 1 and relu activation
- A fully connected layer with 512 units and relu activation
- A fully connected layer with the number of outputs of the environment

Please implement this model `Nature_Paper_Conv` in `model.py` as well as the helper `MLP` class.

```
In [5]:  import model
         rl_test.test_model_DQN(model.Nature_Paper_Conv)
```

Passed

Now we are ready to implement the DQN algorithm.

**Algorithm 1** Deep Q-learning with Experience Replay

Initialize replay memory $\mathcal{D}$ to capacity $N$
Initialize action-value function $Q$ with random weights
**for** episode $= 1, M$ **do**
    Initialise sequence $s_1 = \{x_1\}$ and preprocessed sequenced $\phi_1 = \phi(s_1)$
    **for** $t = 1, T$ **do**
        With probability $\epsilon$ select a random action $a_t$
        otherwise select $a_t = \max_a Q^*(\phi(s_t), a; \theta)$
        Execute action $a_t$ in emulator and observe reward $r_t$ and image $x_{t+1}$
        Set $s_{t+1} = s_t, a_t, x_{t+1}$ and preprocess $\phi_{t+1} = \phi(s_{t+1})$
        Store transition $(\phi_t, a_t, r_t, \phi_{t+1})$ in $\mathcal{D}$
        Sample random minibatch of transitions $(\phi_j, a_j, r_j, \phi_{j+1})$ from $\mathcal{D}$
        Set $y_j = \begin{cases} r_j & \text{for terminal } \phi_{j+1} \\ r_j + \gamma \max_{a'} Q(\phi_{j+1}, a'; \theta) & \text{for non-terminal } \phi_{j+1} \end{cases}$
        Perform a gradient descent step on $(y_j - Q(\phi_j, a_j; \theta))^2$ according to equation 3
    **end for**
**end for**

## Replay Buffer (5 points)

First start by implementing the DQN replay buffer `ReplayBufferDQN` in `replay_buffer.py`. This buffer will store the transitions of the agent and sample them for training.

In [6]:
```python
from replay_buffer import ReplayBufferDQN

rl_test.test_DQN_replay_buffer(ReplayBufferDQN)
```

Passed

## DQN (15 points)

Now implement the `_optimize_model` and `_sample_action` functions in `DQN` in `DQN.py`. The `_optimize_model` function will sample a batch of transitions from the replay buffer and update the model. The `_sample_action` function will sample an action from the model given the current state. Train the model over 200 episdoes, validating every 50 episodes for 30 episodes, before testing the model for 50 episodes at the end.

In [7]:
```python
import wandb
```

In [8]:
```python
wandb.login()
```

**wandb**: Currently logged in as: kbaseba (kbaseba-ucla) to https://api.wandb.a
i. Use `wandb login --relogin` to force relogin

Out[8]: True

In [9]:
```python
wandb.init(project="racing-car-dqn")
```

Tracking run with wandb version 0.20.0

Run data is saved locally in /home/tilboon/Documents/239AS_2/Project_4/wandb/run-20250608_115956-4dulynil

Syncing run **golden-sun-7** to Weights & Biases (docs)

View project at https://wandb.ai/kbaseba-ucla/racing-car-dqn

View run at https://wandb.ai/kbaseba-ucla/racing-car-dqn/runs/4dulynil

Out[9]:    Display W&B run

In [11]:
```python
import DQN
import utils
import torch

# if running with Colab T4 with wandb, it takes 60-70 mins
# if running with Colab T4 w/o wandb, it takes ~30 mins
# your test mean reward idealy should be larger than 400
trainerDQN = DQN.DQN(EnvWrapper(env),
                model.Nature_Paper_Conv,
                lr = 0.00025,
                gamma = 0.95,
                buffer_size = 100000,
                batch_size = 32,
                loss_fn = "mse_loss",
                use_wandb = True,
                device = 'cuda',
                seed = 42,
                epsilon_scheduler = utils.exponential_decay(1, 700, 0.1),
                save_path = utils.get_save_path("DQN","./runs/"))

trainerDQN.train(200, 50, 30, 50, 50)
```

saving to ./runs/DQN/run0

Finishing previous runs because reinit is set to 'default'.

**wandb**: `ERROR` `The nbformat package was not found. It is required to save note book history.`

View run **smart-firefly-1** at: https://wandb.ai/kbaseba-ucla/racing-car-dqn/runs/t9wk404r

View project at: https://wandb.ai/kbaseba-ucla/racing-car-dqn

Synced 5 W&B file(s), 0 media file(s), 0 artifact file(s) and 0 other file(s)

Find logs at: ./wandb/run-20250603_185854-t9wk404r/logs

Tracking run with wandb version 0.20.0

Run data is saved locally in /home/tilboon/Documents/239AS_2/Project_4/wandb/run-20250603_185917-ajn0n650

Syncing run **neat-microwave-2** to Weights & Biases (docs)

View project at https://wandb.ai/kbaseba-ucla/racing-car-dqn

View run at https://wandb.ai/kbaseba-ucla/racing-car-dqn/runs/ajn0n650

Episode: 0: Time: 6.133239984512329 Total Reward: -12.26618705035983 Avg_Loss: 0.0
Episode: 1: Time: 8.21942663192749 Total Reward: -62.948717948718894 Avg_Loss: 0.9044264260750667
Episode: 2: Time: 8.034026622772217 Total Reward: -32.95620437956208 Avg_Loss: 0.855911413692877
Episode: 3: Time: 8.44169282913208 Total Reward: -73.57142857142873 Avg_Loss: 0.825164575834109
Episode: 4: Time: 8.884541988372803 Total Reward: -20.925925925926414 Avg_Loss: 0.7258721724731707
Episode: 5: Time: 8.549166917800903 Total Reward: -38.66197183098643 Avg_Loss: 0.9092964216628495
Episode: 6: Time: 8.060179948806763 Total Reward: -18.66412213740521 Avg_Loss: 0.7732668172787217
Episode: 7: Time: 8.099495649337769 Total Reward: 14.375000000001073 Avg_Loss: 1.035137609085616
Episode: 8: Time: 8.225048780441284 Total Reward: 28.188405797103286 Avg_Loss: 1.4093751558924423
Episode: 9: Time: 8.339138507843018 Total Reward: 75.4545454545497 Avg_Loss: 1.1264866085237815
Episode: 10: Time: 8.327865362167358 Total Reward: -55.784313725490904 Avg_Loss: 1.2182710207059604
Episode: 11: Time: 7.740700006484985 Total Reward: -42.28555956678336 Avg_Loss: 1.3704961291720381
Episode: 12: Time: 8.910240888595581 Total Reward: 62.09969788520029 Avg_Loss: 4.109065845358272
Episode: 13: Time: 8.5490562915802 Total Reward: 17.627986348121983 Avg_Loss: 3.806811966315037
Episode: 14: Time: 5.6029887199401855 Total Reward: -93.01355932203455 Avg_Loss: 4.880658785008496
Episode: 15: Time: 8.656633853912354 Total Reward: 91.49517684887832 Avg_Loss: 11.253737637475759
Episode: 16: Time: 8.690074920654297 Total Reward: -28.33333333333374 Avg_Loss: 4.611919908839114
Episode: 17: Time: 8.704070568084717 Total Reward: 121.94915254237577 Avg_Loss: 6.624895627132985
Episode: 18: Time: 8.76585054397583 Total Reward: 179.14330218069014 Avg_Loss: 4.442848708887561
Episode: 19: Time: 8.740228176116943 Total Reward: 31.21359223300972 Avg_Loss: 4.493706668625359
Episode: 20: Time: 8.527551174163818 Total Reward: 35.281690140847566 Avg_Loss: 3.7453338874488318
Episode: 21: Time: 8.382328987121582 Total Reward: 13.108108108109029 Avg_Loss: 2.711287133333062
Episode: 22: Time: 8.85209846496582 Total Reward: 561.0283687943178 Avg_Loss: 4.066573404213962
Episode: 23: Time: 8.712191104888916 Total Reward: 388.870967741929 Avg_Loss: 4.510514091042912
Episode: 24: Time: 8.741256475448608 Total Reward: 267.1794871794898 Avg_Loss: 5.981761251677986
Episode: 25: Time: 8.629642248153687 Total Reward: 256.6483516483525 Avg_Loss: 5.791294638098789
Episode: 26: Time: 8.749993562698364 Total Reward: 261.64335664334857 Avg_Loss: 6.160182711457004
Episode: 27: Time: 8.63331151008606 Total Reward: 310.5944055944049 Avg_Loss: 4.377944937022794

Episode: 28: Time: 9.600750207901001 Total Reward: 365.81504702193683 Avg_Loss: 5.0955391145553905
Episode: 29: Time: 9.376365661621094 Total Reward: 320.4929577464706 Avg_Loss: 4.9559988785190745
Episode: 30: Time: 9.507494688034058 Total Reward: 442.6344086021476 Avg_Loss: 6.523079610672317
Episode: 31: Time: 9.56268048286438 Total Reward: 117.50000000000418 Avg_Loss: 5.0505260674893355
Episode: 32: Time: 9.467845916748047 Total Reward: 323.25095057034355 Avg_Loss: 5.788560429541003
Episode: 33: Time: 9.7420973777771 Total Reward: 277.549019607846 Avg_Loss: 7.841803481598862
Episode: 34: Time: 9.438688039779663 Total Reward: 6.265822784810526 Avg_Loss: 7.497489858074348
Episode: 35: Time: 9.794541597366333 Total Reward: 307.5157232704401 Avg_Loss: 6.86144556768802
Episode: 36: Time: 9.838263511657715 Total Reward: 210.64784053156586 Avg_Loss: 6.938436169083379
Episode: 37: Time: 9.857799291610718 Total Reward: 132.414330218071 Avg_Loss: 6.415113450599318
Episode: 38: Time: 9.360185146331787 Total Reward: 259.4776119402933 Avg_Loss: 6.521061640827596
Episode: 39: Time: 9.657518148422241 Total Reward: 186.64556962025537 Avg_Loss: 7.583496148345851
Episode: 40: Time: 9.496632099151611 Total Reward: 6.81818181818095 Avg_Loss: 7.929517399864037
Episode: 41: Time: 9.50952434539795 Total Reward: 454.6183206106809 Avg_Loss: 6.39722378514394
Episode: 42: Time: 9.641336917877197 Total Reward: 441.1842105263091 Avg_Loss: 5.7463160863443585
Episode: 43: Time: 9.529329776763916 Total Reward: 443.1818181818096 Avg_Loss: 6.424317680987992
Episode: 44: Time: 9.58205795288086 Total Reward: 271.1016949152571 Avg_Loss: 7.109447162692287
Episode: 45: Time: 9.956891775131226 Total Reward: 69.38356164383993 Avg_Loss: 6.300570757449174
Episode: 46: Time: 9.56554889678955 Total Reward: 65.71428571429033 Avg_Loss: 6.371259860631798
Episode: 47: Time: 9.843086957931519 Total Reward: 419.3769968051065 Avg_Loss: 6.0480705915378925
Episode: 48: Time: 9.608461141586304 Total Reward: 282.55102040816325 Avg_Loss: 5.385454183866997
Episode: 49: Time: 9.557258367538452 Total Reward: 214.52380952381168 Avg_Loss: 6.065896774540429
Validation Mean Reward: 26.815853054890464 Validation Std Reward: 199.75409948699942
Episode: 50: Time: 8.60549259185791 Total Reward: 381.3513513513471 Avg_Loss: 5.764939173429954
Episode: 51: Time: 8.73774790763855 Total Reward: 128.2415902140675 Avg_Loss: 6.107253385191204
Episode: 52: Time: 8.626689910888672 Total Reward: 221.32653061224903 Avg_Loss: 7.174219978456738
Episode: 53: Time: 8.439385652542114 Total Reward: 306.4336917562713 Avg_Loss: 5.665037500758131
Episode: 54: Time: 8.489814519882202 Total Reward: 386.6176470588215 Avg_Loss: 5.723625704020011

Episode: 55: Time: 8.457855701446533 Total Reward: 394.2086330935222 Avg_Loss: 5.593486036573138
Episode: 56: Time: 8.39532732963562 Total Reward: 232.93522267206708 Avg_Loss: 5.550559617391153
Episode: 57: Time: 8.499794006347656 Total Reward: 332.5618374558277 Avg_Loss: 6.0964519131083446
Episode: 58: Time: 8.21054983139038 Total Reward: 74.67509025271121 Avg_Loss: 5.685884224266565
Episode: 59: Time: 8.140634536743164 Total Reward: 41.71875000000306 Avg_Loss: 5.766211925434465
Episode: 60: Time: 8.471680402755737 Total Reward: 190.7142857142894 Avg_Loss: 5.993246082999125
Episode: 61: Time: 8.71571159362793 Total Reward: 234.032258064518 Avg_Loss: 5.961606960837581
Episode: 62: Time: 8.590460538864136 Total Reward: 364.999999999996 Avg_Loss: 6.154986846346815
Episode: 63: Time: 8.458800077438354 Total Reward: 152.34982332155573 Avg_Loss: 5.981433028934383
Episode: 64: Time: 8.475598096847534 Total Reward: 230.5033557047015 Avg_Loss: 5.99139567583549
Episode: 65: Time: 8.747697830200195 Total Reward: 310.06329113923914 Avg_Loss: 5.7521675594714505
Episode: 66: Time: 8.908056020736694 Total Reward: 255.42735042735356 Avg_Loss: 5.509420610776468
Episode: 67: Time: 8.483033418655396 Total Reward: 118.5593220339004 Avg_Loss: 6.093845582809768
Episode: 68: Time: 8.4671471118927 Total Reward: 139.87544483986085 Avg_Loss: 6.142524041047617
Episode: 69: Time: 8.25883173942566 Total Reward: 358.0612244897911 Avg_Loss: 6.04441098806237
Episode: 70: Time: 8.473734855651855 Total Reward: 422.1102661596868 Avg_Loss: 5.681056739903298
Episode: 71: Time: 8.438021421432495 Total Reward: 318.0434782608686 Avg_Loss: 5.853102281313984
Episode: 72: Time: 8.647363424301147 Total Reward: 68.00940438871416 Avg_Loss: 6.315724428962259
Episode: 73: Time: 8.693833589553833 Total Reward: 236.18971061093538 Avg_Loss: 6.885392281187682
Episode: 74: Time: 8.43391728401184 Total Reward: 276.5277777777795 Avg_Loss: 6.391134386303044
Episode: 75: Time: 8.72618579864502 Total Reward: 209.49826989619777 Avg_Loss: 5.4345506299443604
Episode: 76: Time: 8.844269752502441 Total Reward: 270.6249999999926 Avg_Loss: 6.405602575350208
Episode: 77: Time: 8.570299625396729 Total Reward: 82.04918032787255 Avg_Loss: 5.672231001513345
Episode: 78: Time: 8.648847579956055 Total Reward: 329.13793103447654 Avg_Loss: 5.62028311480995
Episode: 79: Time: 8.735196113586426 Total Reward: 201.6666666666709 Avg_Loss: 6.056042985755856
Episode: 80: Time: 8.735011100769043 Total Reward: 206.53846153846482 Avg_Loss: 6.670787956534314
Episode: 81: Time: 8.748886823654175 Total Reward: 87.69230769231005 Avg_Loss: 6.96011440894183
Episode: 82: Time: 8.521762609481812 Total Reward: 260.63380281690377 Avg_Loss: 6.534499041172636

Episode: 83: Time: 8.802938222885132 Total Reward: 354.99999999999426 Avg_Loss: 6.265703735732231
Episode: 84: Time: 9.09769344329834 Total Reward: 296.691394658754 Avg_Loss: 6.3792630283772445
Episode: 85: Time: 8.772404670715332 Total Reward: 246.91176470588715 Avg_Loss: 6.824356597511708
Episode: 86: Time: 8.855376243591309 Total Reward: 305.6514657980422 Avg_Loss: 6.551552474999628
Episode: 87: Time: 8.791648626327515 Total Reward: 276.92982456140174 Avg_Loss: 5.756341840038781
Episode: 88: Time: 8.714039325714111 Total Reward: 193.9610389610425 Avg_Loss: 5.62295334479388
Episode: 89: Time: 8.73051905632019 Total Reward: 427.5563909774339 Avg_Loss: 5.751106779114539
Episode: 90: Time: 8.630814552307129 Total Reward: 46.06583072100583 Avg_Loss: 7.226604164147577
Episode: 91: Time: 8.414000988006592 Total Reward: 315.8527131782954 Avg_Loss: 6.247645106636176
Episode: 92: Time: 8.423139810562134 Total Reward: 300.6043956043938 Avg_Loss: 5.6599397729424865
Episode: 93: Time: 8.745530843734741 Total Reward: 257.73972602739855 Avg_Loss: 6.016664015144861
Episode: 94: Time: 8.826033115386963 Total Reward: 227.36842105263545 Avg_Loss: 7.272338969366891
Episode: 95: Time: 8.872728824615479 Total Reward: 383.72340425531763 Avg_Loss: 6.079880816595895
Episode: 96: Time: 9.15888261795044 Total Reward: 275.3703703703732 Avg_Loss: 6.11970666777186
Episode: 97: Time: 8.72473430633545 Total Reward: 207.81690140845348 Avg_Loss: 6.520103151056947
Episode: 98: Time: 9.107728242874146 Total Reward: 164.8187311178284 Avg_Loss: 5.771718839136493
Episode: 99: Time: 8.846008539199829 Total Reward: 304.9999999999992 Avg_Loss: 5.6634034364163375
Validation Mean Reward: -94.999999999999 Validation Std Reward: 3.750876069797784e-14
Episode: 100: Time: 9.23388385772705 Total Reward: 399.9152542372824 Avg_Loss: 5.495403982010208
Episode: 101: Time: 8.987744331359863 Total Reward: 434.61672473866855 Avg_Loss: 6.438014780773836
Episode: 102: Time: 8.848567485809326 Total Reward: 389.64163822524654 Avg_Loss: 5.865145631698
Episode: 103: Time: 8.694725036621094 Total Reward: 361.0810810810778 Avg_Loss: 5.811214960923715
Episode: 104: Time: 8.781830310821533 Total Reward: 497.71523178807195 Avg_Loss: 5.756218878661885
Episode: 105: Time: 8.800401449203491 Total Reward: 223.02120141342812 Avg_Loss: 5.812086381832091
Episode: 106: Time: 9.186482429504395 Total Reward: 237.3943661971872 Avg_Loss: 6.720707616886171
Episode: 107: Time: 8.744510650634766 Total Reward: 346.17647058823195 Avg_Loss: 7.111493985692994
Episode: 108: Time: 8.76833987236023 Total Reward: 232.7027027027048 Avg_Loss: 7.632528891082571
Episode: 109: Time: 8.879911422729492 Total Reward: 335.55555555555566 Avg_Loss: 6.134643898290746

Episode: 110: Time: 9.093061447143555 Total Reward: 351.0641399416907 Avg_Loss: 6.097547522112101
Episode: 111: Time: 8.824126958847046 Total Reward: 372.532467532464 Avg_Loss: 5.8935531477968235
Episode: 112: Time: 8.824001789093018 Total Reward: 429.1379310344746 Avg_Loss: 5.585125052628397
Episode: 113: Time: 9.022949934005737 Total Reward: 614.090909090896 Avg_Loss: 5.639891529283604
Episode: 114: Time: 9.186776161193848 Total Reward: 246.5384615384594 Avg_Loss: 6.505168010206783
Episode: 115: Time: 8.986930847167969 Total Reward: 178.6156351791576 Avg_Loss: 5.978715783407708
Episode: 116: Time: 8.837463617324829 Total Reward: 399.54545454544837 Avg_Loss: 5.130526297733564
Episode: 117: Time: 9.066534519195557 Total Reward: 383.8273615635105 Avg_Loss: 5.983850382957138
Episode: 118: Time: 8.71725344657898 Total Reward: 339.9315068493129 Avg_Loss: 6.040466426801281
Episode: 119: Time: 8.542380571365356 Total Reward: 272.8571428571459 Avg_Loss: 5.996386554060864
Episode: 120: Time: 8.663614749908447 Total Reward: 303.0263157894716 Avg_Loss: 5.51860421745717
Episode: 121: Time: 8.95458173751831 Total Reward: 337.3529411764688 Avg_Loss: 6.419669531974472
Episode: 122: Time: 9.011008024215698 Total Reward: 395.44585987260365 Avg_Loss: 5.529630923471531
Episode: 123: Time: 9.059798002243042 Total Reward: 399.9494949494921 Avg_Loss: 5.55393497583245
Episode: 124: Time: 8.97329330444336 Total Reward: 254.05660377358896 Avg_Loss: 6.185687293525503
Episode: 125: Time: 8.88105845451355 Total Reward: 362.9124579124533 Avg_Loss: 6.382902432890499
Episode: 126: Time: 8.974822044372559 Total Reward: 85.42813455657964 Avg_Loss: 5.827355312700031
Episode: 127: Time: 9.043782711029053 Total Reward: 404.99999999999335 Avg_Loss: 5.433334853468823
Episode: 128: Time: 8.885504722595215 Total Reward: 294.43894389439083 Avg_Loss: 5.69522147419072
Episode: 129: Time: 8.784563064575195 Total Reward: 519.0350877192882 Avg_Loss: 5.505801822457995
Episode: 130: Time: 8.797478914260864 Total Reward: 350.22968197879345 Avg_Loss: 5.4870838347603295
Episode: 131: Time: 8.824974775314331 Total Reward: 121.39344262295147 Avg_Loss: 6.393650137075857
Episode: 132: Time: 9.025090456008911 Total Reward: 201.17834394904904 Avg_Loss: 5.600372358530509
Episode: 133: Time: 8.847079753875732 Total Reward: 463.3038869257896 Avg_Loss: 5.369048794778455
Episode: 134: Time: 8.914988994598389 Total Reward: 365.207612456741 Avg_Loss: 6.279380510835087
Episode: 135: Time: 8.66708517074585 Total Reward: 451.8164794007389 Avg_Loss: 5.631665067512448
Episode: 136: Time: 8.547762155532837 Total Reward: 282.9527559055024 Avg_Loss: 5.800314729955016
Episode: 137: Time: 7.851160287857056 Total Reward: -15.318725099601961 Avg_Loss: 5.8691440319814605

Episode: 138: Time: 9.014394044876099 Total Reward: 316.585365853655 Avg_Loss: 5.454292745149436
Episode: 139: Time: 8.92708158493042 Total Reward: 181.07361963190544 Avg_Loss: 6.26820403087039
Episode: 140: Time: 9.400326013565063 Total Reward: 296.6666666666647 Avg_Loss: 5.228830572937717
Episode: 141: Time: 8.982694387435913 Total Reward: 487.75862068964534 Avg_Loss: 5.5891978510287625
Episode: 142: Time: 9.114570379257202 Total Reward: 451.66666666666003 Avg_Loss: 5.666927215431919
Episode: 143: Time: 9.304147720336914 Total Reward: 343.80597014925087 Avg_Loss: 5.259942142903304
Episode: 144: Time: 8.967745780944824 Total Reward: 535.5084745762624 Avg_Loss: 5.771103710687461
Episode: 145: Time: 8.678895711898804 Total Reward: 269.7540983606455 Avg_Loss: 5.573106793796315
Episode: 146: Time: 9.143201112747192 Total Reward: 266.7647058823514 Avg_Loss: 6.110257084630117
Episode: 147: Time: 8.977455854415894 Total Reward: 453.0769230769168 Avg_Loss: 5.6753365272233465
Episode: 148: Time: 8.96343445777893 Total Reward: 321.6666666666657 Avg_Loss: 5.698031340326581
Episode: 149: Time: 8.91055417060852 Total Reward: 371.43109540635913 Avg_Loss: 6.076687597427048
Validation Mean Reward: 559.1889593315589 Validation Std Reward: 168.09601292013545
Episode: 150: Time: 9.74891996383667 Total Reward: 474.96587030716023 Avg_Loss: 5.399547977106912
Episode: 151: Time: 9.408512830734253 Total Reward: 583.0303030302925 Avg_Loss: 5.739971555581613
Episode: 152: Time: 9.578917980194092 Total Reward: 400.6268221574315 Avg_Loss: 6.300333744337578
Episode: 153: Time: 9.098928689956665 Total Reward: 340.89743589743523 Avg_Loss: 5.78580046701832
Episode: 154: Time: 9.274168252944946 Total Reward: 170.5172413793144 Avg_Loss: 5.894829004752536
Episode: 155: Time: 9.355210542678833 Total Reward: 240.61643835616832 Avg_Loss: 5.366021521952974
Episode: 156: Time: 9.250321865081787 Total Reward: 487.08955223879695 Avg_Loss: 6.242042586583049
Episode: 157: Time: 9.536597490310669 Total Reward: 523.4615384615292 Avg_Loss: 5.84925790193702
Episode: 158: Time: 9.176278114318848 Total Reward: 536.2056737588568 Avg_Loss: 5.709083238569629
Episode: 159: Time: 9.131852388381958 Total Reward: 463.8235294117604 Avg_Loss: 6.024519376394127
Episode: 160: Time: 9.382244348526001 Total Reward: 427.49134948096105 Avg_Loss: 6.282056907645795
Episode: 161: Time: 9.44643497467041 Total Reward: 198.91891891892226 Avg_Loss: 6.331373120556359
Episode: 162: Time: 9.365617990493774 Total Reward: 323.9189189189187 Avg_Loss: 6.872203869979923
Episode: 163: Time: 9.285917520523071 Total Reward: 381.6666666666603 Avg_Loss: 5.938843585863835
Episode: 164: Time: 9.267295122146606 Total Reward: 347.90657439446466 Avg_Loss: 6.810720825395665

Episode: 165: Time: 9.418452978134155 Total Reward: 363.46153846153686 Avg_Loss: 5.962919083963923
Episode: 166: Time: 9.433175325393677 Total Reward: 456.40186915887136 Avg_Loss: 5.8133620484536435
Episode: 167: Time: 9.432826042175293 Total Reward: 526.1604095563036 Avg_Loss: 5.4641768191041065
Episode: 168: Time: 9.377393245697021 Total Reward: 483.59531772574405 Avg_Loss: 5.8337165958741135
Episode: 169: Time: 9.260392904281616 Total Reward: 363.90410958903766 Avg_Loss: 6.328909038495617
Episode: 170: Time: 9.110474824905396 Total Reward: 506.6260162601555 Avg_Loss: 6.174251726695469
Episode: 171: Time: 9.624365329742432 Total Reward: 415.38575667655596 Avg_Loss: 6.052297151389242
Episode: 172: Time: 9.425992965698242 Total Reward: 454.99999999999125 Avg_Loss: 6.087077918172884
Episode: 173: Time: 8.892867803573608 Total Reward: 288.7638376383669 Avg_Loss: 6.220018607227742
Episode: 174: Time: 9.094950914382935 Total Reward: 547.8571428571324 Avg_Loss: 6.8448557483048
Episode: 175: Time: 9.266983032226562 Total Reward: 549.194756554299 Avg_Loss: 5.922192030594129
Episode: 176: Time: 9.274991035461426 Total Reward: 228.84341637011144 Avg_Loss: 6.27623997515991
Episode: 177: Time: 9.250582933425903 Total Reward: 598.7269372693652 Avg_Loss: 5.736074218229086
Episode: 178: Time: 9.451613426208496 Total Reward: 85.60200668896768 Avg_Loss: 6.16952095913286
Episode: 179: Time: 9.47279977798462 Total Reward: 502.35973597359094 Avg_Loss: 6.197666877458076
Episode: 180: Time: 9.59806489944458 Total Reward: 274.90595611285374 Avg_Loss: 6.164513395613983
Episode: 181: Time: 9.144271612167358 Total Reward: 627.6027397260159 Avg_Loss: 6.278574197232222
Episode: 182: Time: 9.238120555877686 Total Reward: 485.756013745697 Avg_Loss: 6.123357141719145
Episode: 183: Time: 9.756761074066162 Total Reward: 333.16091954022954 Avg_Loss: 6.510135272971723
Episode: 184: Time: 9.192201614379883 Total Reward: 608.7037037036957 Avg_Loss: 6.029204368591309
Episode: 185: Time: 9.261204957962036 Total Reward: 643.0073800737939 Avg_Loss: 6.1038742916924615
Episode: 186: Time: 9.786289691925049 Total Reward: 274.4267515923545 Avg_Loss: 7.135785656816819
Episode: 187: Time: 9.738494157791138 Total Reward: 417.1212121212061 Avg_Loss: 6.503933804375785
Episode: 188: Time: 9.409322023391724 Total Reward: 429.3055555555491 Avg_Loss: 6.025558203208346
Episode: 189: Time: 9.303148746490479 Total Reward: 408.52112676055685 Avg_Loss: 5.53696325646729
Episode: 190: Time: 9.182215690612793 Total Reward: 439.2960288808616 Avg_Loss: 6.4564922366823465
Episode: 191: Time: 9.40623927116394 Total Reward: 360.47945205479 Avg_Loss: 5.903223672834765
Episode: 192: Time: 9.426127195358276 Total Reward: 272.9245283018884 Avg_Loss: 6.271274244084077

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Episode: 193: Time: 9.23553991317749 Total Reward: 529.060150375933 Avg_Los
s: 6.307258181211327
Episode: 194: Time: 9.657405853271484 Total Reward: 446.7956656346656 Avg_Lo
ss: 5.9197905384191944
Episode: 195: Time: 9.41226601600647 Total Reward: 439.4827586206824 Avg_Los
s: 6.738179166777795
Episode: 196: Time: 9.250213861465454 Total Reward: 386.75182481751216 Avg_L
oss: 6.322154710272781
Episode: 197: Time: 9.59204912185669 Total Reward: 389.330484330479 Avg_Los
s: 6.575044793241164
Episode: 198: Time: 9.279990673065186 Total Reward: 425.5992509363243 Avg_Lo
ss: 6.366872571095699
Episode: 199: Time: 9.471853017807007 Total Reward: 242.57961783439643 Avg_L
oss: 6.635416620919685
Validation Mean Reward: 623.8010792168969 Validation Std Reward: 201.9706074
1012447
Test Mean Reward: 605.0771519145571 Test Std Reward: 181.9873134653002
```

Please include a plot of the training and validation rewards over the episodes in the report. Anwer the question in no more than 2 sentences: Does the loss matter in DQN? Why or why not?

Your answer:

Certainly, loss has significance in DQN as it helps the Q-network converge towards the optimal action-value function by reducing the error associated with predicted and target Q-values. Nevertheless, performance isn't always strong when loss is low, as that low loss may not indicate how well the learned policy performs within the environment. loss !(always)= good policy - since overfitting or poor exploration can lead to low loss but suboptimal actions.

In [17]:
```python
from IPython.display import Image, display
import os

img_path = os.path.join('.', 'images', 'dqn_stats.png')
display(Image(filename=img_path))
```

## Animation

We can also draw a animation of the car in one game, the code is provided below. The animation is just for your reference to get a feeling of how good your model is. No need to submit in your submission. We will grade based on your plots of training and validation above.

In [14]:
```python
eval_env = gym.make('CarRacing-v3', continuous=True, render_mode='rgb_array'
eval_env = EnvWrapper(eval_env)

total_rewards, frames = trainerDQN.play_episode(0, True, 42)
anim = animate(frames)
HTML(anim.to_jshtml())
```

Out[14]:
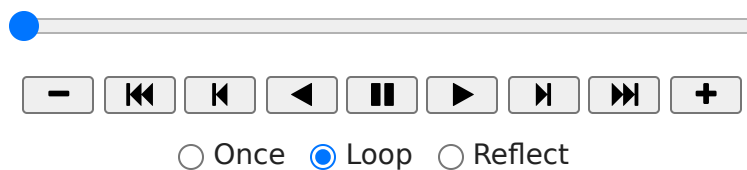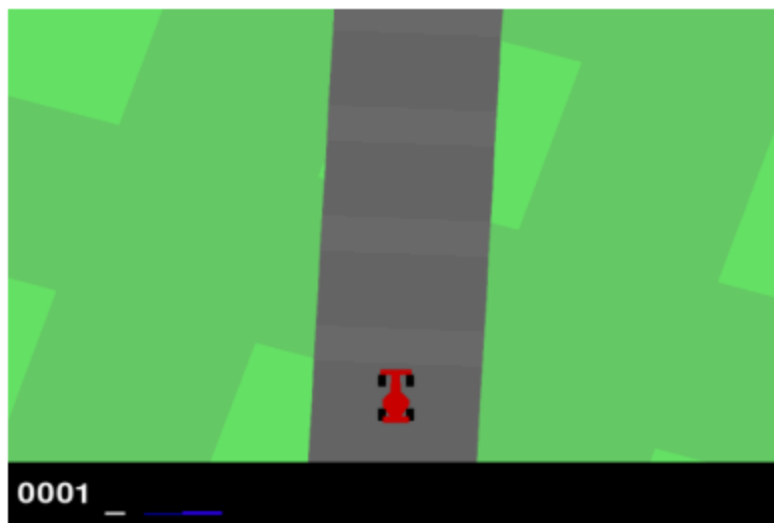
# Double DQN (10 points)

In the original paper, where the algorithim is shown above, the estimated target Q value was computed using the current Q network's weights. However, this can lead to overestimation of the Q values. To mitigate this, we can use the target network to compute the target Q value. This is known as Double DQN.

## Hard updating Target Network (5 points)

Original implementations for this involved hard updates, where the model weights were copied to the target network every C steps. This is known as hard updating. This was what was used in the Nature Paper by Mnih et al 2015 "Human-level control through deep reinforcement learning"

Please implement this by implementing the `_optimize_model` and `_update_model` classes in `HardUpdateDQN` in `DQN.py`.

In [15]:
```python
import torch
import utils
import DQN
import model
from env_wrapper import EnvWrapper

trainerHardUpdateDQN = DQN.HardUpdateDQN(EnvWrapper(env),
            model.Nature_Paper_Conv,
            update_freq = 100,
            lr = 0.00025,
            gamma = 0.95,
            buffer_size = 100000,
            batch_size = 32,
            loss_fn = "mse_loss",
            use_wandb = True,
            device = 'cuda',
```

```
                    seed = 42,
                    epsilon_scheduler = utils.exponential_decay(1, 1000, 0.1),
                    save_path = utils.get_save_path("DoubleDQN_HardUpdates/",")./

trainerHardUpdateDQN.train(200, 50, 30, 50, 50)
```

 saving to ./runs/DoubleDQN_HardUpdates/run0
Finishing previous runs because reinit is set to 'default'.

## Run history:

| | |
|---|---|
| loss |  |
| mean_reward | |
| mean_test_reward | |
| std_reward | |
| std_test_reward | |
| total_reward | |

## Run summary:

| | |
|---|---|
| loss | 6.63542 |
| mean_reward | 623.80108 |
| mean_test_reward | 605.07715 |
| std_reward | 201.97061 |
| std_test_reward | 181.98731 |
| total_reward | 242.57962 |

View run **neat-microwave-2** at: https://wandb.ai/kbaseba-ucla/racing-car-dqn/runs/ajn0n650
View project at: https://wandb.ai/kbaseba-ucla/racing-car-dqn
Synced 5 W&B file(s), 0 media file(s), 0 artifact file(s) and 0 other file(s)
Find logs at: ./wandb/run-20250603_185917-ajn0n650/logs
Tracking run with wandb version 0.20.0

Run data is saved locally in
/home/tilboon/Documents/239AS_2/Project_4/wandb/run-20250603_200700-u0lwj2ye
Syncing run **charmed-salad-3** to Weights & Biases (docs)
View project at https://wandb.ai/kbaseba-ucla/racing-car-dqn
View run at https://wandb.ai/kbaseba-ucla/racing-car-dqn/runs/u0lwj2ye

Episode: 0: Time: 6.266873121261597 Total Reward: -75.32786885245906 Avg_Loss: 0.0

Episode: 1: Time: 7.877405643463135 Total Reward: -27.65993265993273 Avg_Loss: 0.5757119180456658

Episode: 2: Time: 8.303340673446655 Total Reward: -49.38596491228109 Avg_Loss: 0.6556620778468978

Episode: 3: Time: 8.493849039077759 Total Reward: -25.379746835443456 Avg_Loss: 0.669369897891243

Episode: 4: Time: 8.35913872718811 Total Reward: -30.593220338983627 Avg_Loss: 0.7232532752912586

Episode: 5: Time: 8.36700439453125 Total Reward: -60.18987341772223 Avg_Loss: 0.6708114022279487

Episode: 6: Time: 8.604320049285889 Total Reward: -48.55191256830665 Avg_Loss: 0.6209662687502989

Episode: 7: Time: 8.404366254806519 Total Reward: -40.945945945946264 Avg_Loss: 0.5619077489030462

Episode: 8: Time: 8.311173677444458 Total Reward: -36.60583941605904 Avg_Loss: 0.5841519497334957

Episode: 9: Time: 8.698513507843018 Total Reward: 106.29870129870064 Avg_Loss: 0.6069765026767214

Episode: 10: Time: 8.373558044433594 Total Reward: -30.25179856115177 Avg_Loss: 0.7633207832627437

Episode: 11: Time: 8.466575384140015 Total Reward: -46.298701298701985 Avg_Loss: 0.7232574843058065

Episode: 12: Time: 8.293853759765625 Total Reward: -24.577464788733096 Avg_Loss: 0.7492708108004402

Episode: 13: Time: 8.515872478485107 Total Reward: -16.146953405018504 Avg_Loss: 0.7753119613943982

Episode: 14: Time: 8.757607460021973 Total Reward: 143.09523809524197 Avg_Loss: 0.8553179518139663

Episode: 15: Time: 8.775694131851196 Total Reward: 128.68421052631842 Avg_Loss: 1.0059000729512768

Episode: 16: Time: 8.349969148635864 Total Reward: 33.47222222222406 Avg_Loss: 1.2181579729839533

Episode: 17: Time: 8.585930347442627 Total Reward: -30.018050541516622 Avg_Loss: 1.1749991385125313

Episode: 18: Time: 8.480395793914795 Total Reward: 153.12030075188375 Avg_Loss: 1.3743790159581089

Episode: 19: Time: 8.719565629959106 Total Reward: -16.146953405018692 Avg_Loss: 1.4068439019327403

Episode: 20: Time: 8.536231279373169 Total Reward: -23.571428571429312 Avg_Loss: 1.5648912208921768

Episode: 21: Time: 8.528996229171753 Total Reward: -32.716262975779195 Avg_Loss: 1.694191945701086

Episode: 22: Time: 8.65802550315857 Total Reward: 279.9999999999893 Avg_Loss: 1.8147937647935724

Episode: 23: Time: 8.67793607711792 Total Reward: 201.29629629630028 Avg_Loss: 2.287161427886546

Episode: 24: Time: 8.77269458770752 Total Reward: 114.5238095238133 Avg_Loss: 2.563684720952972

Episode: 25: Time: 8.833858013153076 Total Reward: 99.4444444444487 Avg_Loss: 2.510592081216203

Episode: 26: Time: 8.685228824615479 Total Reward: -38.333333333333414 Avg_Loss: 2.3019592178468944

Episode: 27: Time: 8.704230308532715 Total Reward: 41.51877133106064 Avg_Loss: 1.9497923707010365

Episode: 28: Time: 8.330749034881592 Total Reward: 60.47703180212432 Avg_Loss: 2.4202153859268716
Episode: 29: Time: 8.986355543136597 Total Reward: 286.62544169611596 Avg_Loss: 2.2160942384174893
Episode: 30: Time: 8.18997836112976 Total Reward: -38.521594684386116 Avg_Loss: 2.2618502893117296
Episode: 31: Time: 8.220182418823242 Total Reward: -0.6603773584911372 Avg_Loss: 2.453497886657715
Episode: 32: Time: 8.847923517227173 Total Reward: 157.30769230769445 Avg_Loss: 2.3867683430679705
Episode: 33: Time: 8.66874885559082 Total Reward: 327.14532871971954 Avg_Loss: 2.663296186498233
Episode: 34: Time: 8.927073955535889 Total Reward: 33.12499999999906 Avg_Loss: 2.976613777274845
Episode: 35: Time: 8.83239459991455 Total Reward: 214.76430976431428 Avg_Loss: 3.030421138060193
Episode: 36: Time: 8.79420280456543 Total Reward: 91.13138686131711 Avg_Loss: 3.2349655923723173
Episode: 37: Time: 8.763880729675293 Total Reward: 183.35051546391958 Avg_Loss: 2.977044665638138
Episode: 38: Time: 8.459109544754028 Total Reward: 203.18181818182052 Avg_Loss: 2.9591680324378133
Episode: 39: Time: 8.668036937713623 Total Reward: 226.07023411371725 Avg_Loss: 3.1741584163753926
Episode: 40: Time: 8.843774318695068 Total Reward: 478.37883959043427 Avg_Loss: 3.214887613759321
Episode: 41: Time: 8.592675685882568 Total Reward: 207.63157894737213 Avg_Loss: 3.284646310475694
Episode: 42: Time: 8.550989627838135 Total Reward: 367.8975265017678 Avg_Loss: 3.5160669198557106
Episode: 43: Time: 8.566348314285278 Total Reward: 303.5765124555109 Avg_Loss: 3.638552453838477
Episode: 44: Time: 8.721383810043335 Total Reward: 357.2292993630568 Avg_Loss: 3.504936333964853
Episode: 45: Time: 8.817419052124023 Total Reward: 314.0909090909065 Avg_Loss: 3.8150374926939734
Episode: 46: Time: 8.700479984283447 Total Reward: 399.4237918215538 Avg_Loss: 4.262487466595754
Episode: 47: Time: 8.907272100448608 Total Reward: 375.9302325581332 Avg_Loss: 4.5757001262752945
Episode: 48: Time: 8.633474111557007 Total Reward: 306.9607843137267 Avg_Loss: 4.445991744013393
Episode: 49: Time: 8.868477582931519 Total Reward: -15.000000000000243 Avg_Loss: 4.550339279555473
Validation Mean Reward: -94.999999999999 Validation Std Reward: 3.3927950614478624e-14
Episode: 50: Time: 8.795664310455322 Total Reward: 235.85501858736336 Avg_Loss: 3.77336766940205
Episode: 51: Time: 8.779613494873047 Total Reward: 275.25316455695656 Avg_Loss: 4.194430611213716
Episode: 52: Time: 8.528160572052002 Total Reward: 468.99999999999494 Avg_Loss: 4.062984642361393
Episode: 53: Time: 9.083875179290771 Total Reward: 493.65248226949615 Avg_Loss: 4.050758403890273
Episode: 54: Time: 9.004987955093384 Total Reward: 190.28528528528798 Avg_Loss: 4.740397757842761

Episode: 55: Time: 8.814074039459229 Total Reward: 75.96774193548774 Avg_Loss: 4.611291925446326
Episode: 56: Time: 8.535109996795654 Total Reward: 185.15564202334767 Avg_Loss: 4.445487646996474
Episode: 57: Time: 8.850864887237549 Total Reward: 333.5714285714256 Avg_Loss: 5.015415890877988
Episode: 58: Time: 9.252506017684937 Total Reward: 230.00000000000313 Avg_Loss: 4.4381205394488425
Episode: 59: Time: 8.917612791061401 Total Reward: 298.393393393392 Avg_Loss: 4.433242987183964
Episode: 60: Time: 8.668699741363525 Total Reward: 359.8494983277565 Avg_Loss: 4.489874931443639
Episode: 61: Time: 8.80156946182251 Total Reward: 308.38983050846974 Avg_Loss: 4.613950657243488
Episode: 62: Time: 9.086069107055664 Total Reward: 356.7133956386287 Avg_Loss: 4.3322186900788
Episode: 63: Time: 8.900357484817505 Total Reward: 115.00000000000321 Avg_Loss: 4.539278195685699
Episode: 64: Time: 8.660009860992432 Total Reward: 404.9999999999949 Avg_Loss: 4.32696511014169
Episode: 65: Time: 8.683341264724731 Total Reward: 276.13402061855913 Avg_Loss: 4.945884339949664
Episode: 66: Time: 8.64181399345398 Total Reward: 177.72727272727664 Avg_Loss: 5.1018973353530175
Episode: 67: Time: 8.237791538238525 Total Reward: 332.08333333332627 Avg_Loss: 4.505151315396573
Episode: 68: Time: 8.558026790618896 Total Reward: 376.7607973421861 Avg_Loss: 4.820704914441629
Episode: 69: Time: 8.69057321548462 Total Reward: 371.6666666666612 Avg_Loss: 4.800717422942154
Episode: 70: Time: 8.474892139434814 Total Reward: 191.19528619528919 Avg_Loss: 4.555085998122432
Episode: 71: Time: 8.698236465454102 Total Reward: 185.59701492537695 Avg_Loss: 4.830152309241415
Episode: 72: Time: 8.508115768432617 Total Reward: 95.62500000000185 Avg_Loss: 4.9989546797856566
Episode: 73: Time: 8.605000257492065 Total Reward: 286.5789473684204 Avg_Loss: 4.8216129766792815
Episode: 74: Time: 8.658449649810791 Total Reward: 109.620462046205 Avg_Loss: 4.867231259826853
Episode: 75: Time: 8.379562377929688 Total Reward: 512.287449392704 Avg_Loss: 4.684149982047682
Episode: 76: Time: 8.32052206993103 Total Reward: 539.9809885931481 Avg_Loss: 4.731247884385726
Episode: 77: Time: 8.481495380401611 Total Reward: 199.30379746835635 Avg_Loss: 4.391253661207792
Episode: 78: Time: 8.703047037124634 Total Reward: 169.33121019108663 Avg_Loss: 4.810426331367813
Episode: 79: Time: 8.57757019996643 Total Reward: 253.27586206896876 Avg_Loss: 4.735198689609015
Episode: 80: Time: 8.90942668914795 Total Reward: 469.8854961831971 Avg_Loss: 4.753960826817681
Episode: 81: Time: 8.806813955307007 Total Reward: 368.41463414633836 Avg_Loss: 4.979806552414133
Episode: 82: Time: 8.80982255935669 Total Reward: 358.33333333332604 Avg_Loss: 4.614816772837599

Episode: 83: Time: 8.699279069900513 Total Reward: 246.21621621621617 Avg_Loss: 4.977071939897137
Episode: 84: Time: 8.81799864768982 Total Reward: 285.1369863013699 Avg_Loss: 5.137629239499068
Episode: 85: Time: 9.06259822845459 Total Reward: 302.43589743589894 Avg_Loss: 4.6886935294175345
Episode: 86: Time: 8.741300821304321 Total Reward: 433.30188679244674 Avg_Loss: 4.75967075594333
Episode: 87: Time: 8.876007080078125 Total Reward: 238.33333333333582 Avg_Loss: 4.707275180756545
Episode: 88: Time: 8.679618120193481 Total Reward: 318.1274131274124 Avg_Loss: 4.998854909624372
Episode: 89: Time: 8.56941843032837 Total Reward: 431.6903914590685 Avg_Loss: 5.265257913024485
Episode: 90: Time: 8.587276220321655 Total Reward: 294.5131086142313 Avg_Loss: 5.3138946084415215
Episode: 91: Time: 9.062479734420776 Total Reward: 349.4444444444401 Avg_Loss: 4.849037592150584
Episode: 92: Time: 2.7922046184539795 Total Reward: -69.42815884476568 Avg_Loss: 5.459416762376443
Episode: 93: Time: 8.994069337844849 Total Reward: 289.08304498269956 Avg_Loss: 5.381299365468386
Episode: 94: Time: 8.704679012298584 Total Reward: 323.7725631768913 Avg_Loss: 7.52458951353025
Episode: 95: Time: 8.686879873275757 Total Reward: 448.47826086956013 Avg_Loss: 5.152436749774869
Episode: 96: Time: 8.99607801437378 Total Reward: 280.7961783439511 Avg_Loss: 4.799121176996151
Episode: 97: Time: 9.041385412216187 Total Reward: 110.98006644518294 Avg_Loss: 4.897289478478312
Episode: 98: Time: 9.07898211479187 Total Reward: 249.93670886076328 Avg_Loss: 5.160477481970267
Episode: 99: Time: 8.811305046081543 Total Reward: 324.79522184299805 Avg_Loss: 5.305092581680843
Validation Mean Reward: 393.01034276666144 Validation Std Reward: 217.71491216566633
Episode: 100: Time: 9.301905393600464 Total Reward: 324.1419141914139 Avg_Loss: 5.579878955328164
Episode: 101: Time: 8.352180242538452 Total Reward: -26.654676258993515 Avg_Loss: 5.498592734336853
Episode: 102: Time: 8.80241870880127 Total Reward: 336.0954063604195 Avg_Loss: 4.97672310246139
Episode: 103: Time: 8.971456289291382 Total Reward: 69.17910447761663 Avg_Loss: 4.7959440731200855
Episode: 104: Time: 9.046841144561768 Total Reward: 406.5974440894505 Avg_Loss: 4.913562899878045
Episode: 105: Time: 8.816270589828491 Total Reward: 371.4179104477587 Avg_Loss: 5.19844705066761
Episode: 106: Time: 8.629805088043213 Total Reward: 335.65693430656455 Avg_Loss: 6.422007110940308
Episode: 107: Time: 8.607624292373657 Total Reward: 397.75362318840234 Avg_Loss: 5.111141394166386
Episode: 108: Time: 8.487945795059204 Total Reward: 112.40740740741057 Avg_Loss: 5.426862852913993
Episode: 109: Time: 8.649800062179565 Total Reward: 348.2234432234392 Avg_Loss: 5.361711390879976

Episode: 110: Time: 8.960063457489014 Total Reward: 316.1842105263152 Avg_Loss: 4.792537425746437
Episode: 111: Time: 8.667465925216675 Total Reward: 178.68421052631965 Avg_Loss: 5.728241658511282
Episode: 112: Time: 8.964413404464722 Total Reward: 373.96551724137464 Avg_Loss: 5.474235053823776
Episode: 113: Time: 8.857991695404053 Total Reward: 266.11111111110597 Avg_Loss: 5.696340840403773
Episode: 114: Time: 8.671756267547607 Total Reward: 350.6140350877171 Avg_Loss: 5.635581993255295
Episode: 115: Time: 8.958330869674683 Total Reward: 266.48648648648964 Avg_Loss: 5.608472778516657
Episode: 116: Time: 8.71580457687378 Total Reward: 58.846153846157826 Avg_Loss: 5.326121588214105
Episode: 117: Time: 8.861892461776733 Total Reward: 472.94425087107504 Avg_Loss: 4.927772820997639
Episode: 118: Time: 8.97496223449707 Total Reward: 285.95238095238216 Avg_Loss: 5.18305869613375
Episode: 119: Time: 8.070298433303833 Total Reward: 34.824561403511225 Avg_Loss: 5.118649596927547
Episode: 120: Time: 8.90090274810791 Total Reward: 365.06389776357673 Avg_Loss: 5.507736582715972
Episode: 121: Time: 8.756322145462036 Total Reward: 354.9999999999919 Avg_Loss: 5.287329765928893
Episode: 122: Time: 8.971147060394287 Total Reward: 408.3557046979815 Avg_Loss: 5.3689607241574455
Episode: 123: Time: 9.073268175125122 Total Reward: 313.49673202614355 Avg_Loss: 4.933979367508607
Episode: 124: Time: 8.740240573883057 Total Reward: 290.7677902621708 Avg_Loss: 5.818628150875829
Episode: 125: Time: 8.82532525062561 Total Reward: 342.28813559321145 Avg_Loss: 5.716743645547819
Episode: 126: Time: 8.95838737487793 Total Reward: 259.9488054607546 Avg_Loss: 5.1740575447803785
Episode: 127: Time: 8.832682371139526 Total Reward: 268.29588014981454 Avg_Loss: 5.038969169143869
Episode: 128: Time: 8.866991758346558 Total Reward: 327.48062015503996 Avg_Loss: 5.487644368860902
Episode: 129: Time: 8.960815906524658 Total Reward: 337.2580645161239 Avg_Loss: 5.407619752803771
Episode: 130: Time: 8.739174127578735 Total Reward: 465.43956043955234 Avg_Loss: 5.39601886572958
Episode: 131: Time: 8.494217872619629 Total Reward: 201.2962962962972 Avg_Loss: 4.966861033639988
Episode: 132: Time: 8.809686660766602 Total Reward: 341.89320388348983 Avg_Loss: 5.021890603193716
Episode: 133: Time: 8.684836864471436 Total Reward: 589.2105263157788 Avg_Loss: 5.2610951341500805
Episode: 134: Time: 8.9497971534729 Total Reward: 423.9393939393904 Avg_Loss: 5.268076979312577
Episode: 135: Time: 9.131422996520996 Total Reward: 398.4640522875736 Avg_Loss: 5.392292007177818
Episode: 136: Time: 9.100772857666016 Total Reward: 278.7704918032714 Avg_Loss: 5.580633123381799
Episode: 137: Time: 8.937803745269775 Total Reward: 494.65517241378063 Avg_Loss: 5.77357807179459

Episode: 138: Time: 9.112977743148804 Total Reward: 343.0664652567947 Avg_Loss: 6.186795872800491
Episode: 139: Time: 8.796247243881226 Total Reward: 516.9402985074547 Avg_Loss: 5.980726909236748
Episode: 140: Time: 9.090883731842041 Total Reward: 335.5084745762684 Avg_Loss: 5.579471842581484
Episode: 141: Time: 9.000151872634888 Total Reward: 461.3139931740543 Avg_Loss: 5.399814761486374
Episode: 142: Time: 8.923707008361816 Total Reward: 309.6052631578864 Avg_Loss: 5.489007609231131
Episode: 143: Time: 8.796001672744751 Total Reward: 518.2404181184577 Avg_Loss: 5.4803707439358496
Episode: 144: Time: 9.113590240478516 Total Reward: 166.7647058823561 Avg_Loss: 5.022120198281873
Episode: 145: Time: 8.807538270950317 Total Reward: 325.0000000000017 Avg_Loss: 5.696399968211391
Episode: 146: Time: 8.953400373458862 Total Reward: 240.57046979866087 Avg_Loss: 5.538095957090874
Episode: 147: Time: 9.371840238571167 Total Reward: 269.16184971097863 Avg_Loss: 5.738351973665862
Episode: 148: Time: 8.972156524658203 Total Reward: 404.99999999999267 Avg_Loss: 5.705823469562691
Episode: 149: Time: 9.070889472961426 Total Reward: 376.6981132075348 Avg_Loss: 7.343291616239467
Validation Mean Reward: 541.6028979697245 Validation Std Reward: 143.13115484230534
Episode: 150: Time: 9.312124729156494 Total Reward: 477.41379310343814 Avg_Loss: 6.2417543510429
Episode: 151: Time: 9.260217666625977 Total Reward: 416.7845117845062 Avg_Loss: 6.089014342853001
Episode: 152: Time: 9.269031286239624 Total Reward: 342.4999999999977 Avg_Loss: 5.264343573265717
Episode: 153: Time: 9.193868398666382 Total Reward: 445.7166123778413 Avg_Loss: 5.674996855880032
Episode: 154: Time: 8.91148591041565 Total Reward: 249.26229508197002 Avg_Loss: 5.2319815218949515
Episode: 155: Time: 8.861860513687134 Total Reward: 612.2243346007473 Avg_Loss: 5.148778899377134
Episode: 156: Time: 8.898478746414185 Total Reward: 563.9147286821656 Avg_Loss: 5.520360475828667
Episode: 157: Time: 9.061407566070557 Total Reward: 594.5306859205695 Avg_Loss: 5.9584978368102
Episode: 158: Time: 8.907414197921753 Total Reward: 283.4722222222253 Avg_Loss: 5.996825795213716
Episode: 159: Time: 9.0666024684906 Total Reward: 360.1282051282052 Avg_Loss: 6.626289459837585
Episode: 160: Time: 8.742763996124268 Total Reward: 630.2252252252143 Avg_Loss: 6.426816237072985
Episode: 161: Time: 8.882120609283447 Total Reward: 336.9066147859886 Avg_Loss: 6.362463070564911
Episode: 162: Time: 9.11575722694397 Total Reward: 297.026578073083 Avg_Loss: 5.999397999098321
Episode: 163: Time: 9.348807096481323 Total Reward: 205.8849557522143 Avg_Loss: 5.577792072496495
Episode: 164: Time: 9.173773050308228 Total Reward: 353.90510948904387 Avg_Loss: 6.673233438940609

```
Episode: 165: Time: 9.167500972747803 Total Reward: 503.59154929576823 Avg_L
oss: 6.45747306166S767
Episode: 166: Time: 9.357877969741821 Total Reward: 391.06811145510187 Avg_L
oss: 5.7700759052228525
Episode: 167: Time: 9.113815069198608 Total Reward: 556.7241379310209 Avg_Lo
ss: 5.232491083505775
Episode: 168: Time: 9.155786514282227 Total Reward: 426.8855218855114 Avg_Lo
ss: 5.679922026746413
Episode: 169: Time: 9.422545194625854 Total Reward: 359.81927710843286 Avg_L
oss: 5.681995139402502
Episode: 170: Time: 9.188294410705566 Total Reward: 540.3790613718307 Avg_Lo
ss: 6.259949086093101
Episode: 171: Time: 9.086500644683838 Total Reward: 248.97163120567822 Avg_L
oss: 5.9890271505387895
Episode: 172: Time: 9.018906354904175 Total Reward: 549.7368421052543 Avg_Lo
ss: 5.95718705854496
Episode: 173: Time: 8.88513445854187 Total Reward: 534.7577854671212 Avg_Los
s: 6.023873747897749
Episode: 174: Time: 8.997731447219849 Total Reward: 571.6666666666624 Avg_Lo
ss: 5.970991446190522
Episode: 175: Time: 9.174432754516602 Total Reward: 509.6511627906874 Avg_Lo
ss: 5.8785796415905995
Episode: 176: Time: 9.353077411651611 Total Reward: 316.5755627009658 Avg_Lo
ss: 6.196056654473312
Episode: 177: Time: 9.110191106796265 Total Reward: 585.85106382978 Avg_Los
s: 5.939222324796083
Episode: 178: Time: 9.137876272201538 Total Reward: 495.2777777777688 Avg_Lo
ss: 5.44801377498803
Episode: 179: Time: 9.09185266494751 Total Reward: 272.1328671328708 Avg_Los
s: 5.794509790023835
Episode: 180: Time: 9.28247857093811 Total Reward: 339.21052631578425 Avg_Lo
ss: 5.88858454968749
Episode: 181: Time: 9.357555389404297 Total Reward: 336.8936877076314 Avg_Lo
ss: 6.126571315677226
Episode: 182: Time: 9.073419332504272 Total Reward: 623.1467181467056 Avg_Lo
ss: 6.261994555717757
Episode: 183: Time: 9.252177476882935 Total Reward: 477.8155339805762 Avg_Lo
ss: 6.241817652678289
Episode: 184: Time: 9.274469375610352 Total Reward: 411.28930817609404 Avg_L
oss: 5.986658345751402
Episode: 185: Time: 9.390977144241333 Total Reward: 205.2915451895049 Avg_Lo
ss: 5.793823542715121
Episode: 186: Time: 9.03321123123169 Total Reward: 584.9999999999869 Avg_Los
s: 5.422228479585728
Episode: 187: Time: 9.124595403671265 Total Reward: 618.2616487455099 Avg_Lo
ss: 5.830481381977306
Episode: 188: Time: 9.273937702178955 Total Reward: 529.1830065359371 Avg_Lo
ss: 5.809072942292991
Episode: 189: Time: 9.089905738830566 Total Reward: 619.8148148148014 Avg_Lo
ss: 5.742373068793481
Episode: 190: Time: 8.872382402420044 Total Reward: 540.2941176470497 Avg_Lo
ss: 6.3485914328519035
Episode: 191: Time: 9.39250135421753 Total Reward: 543.7959866220654 Avg_Los
s: 6.840180551805416
Episode: 192: Time: 9.129821062088013 Total Reward: 248.7500000000038 Avg_Lo
ss: 6.545473282076731
```

Episode: 193: Time: 9.196569442749023 Total Reward: 344.560439560428 Avg_Loss: 6.120430489548114
Episode: 194: Time: 9.339927673339844 Total Reward: 512.9734219268989 Avg_Loss: 6.530639248735764
Episode: 195: Time: 9.354246854782104 Total Reward: 378.52941176469756 Avg_Loss: 5.968082449516328
Episode: 196: Time: 8.863152980804443 Total Reward: 457.816901408443 Avg_Loss: 5.998983409224438
Episode: 197: Time: 9.094125747680664 Total Reward: 562.3208722741333 Avg_Loss: 5.484310730164792
Episode: 198: Time: 9.246551752090454 Total Reward: 436.5315315315284 Avg_Loss: 6.7771320518325355
Episode: 199: Time: 9.032127141952515 Total Reward: 524.7183098591468 Avg_Loss: 6.306603697167725
Validation Mean Reward: 513.33562338453 Validation Std Reward: 170.58048857484997
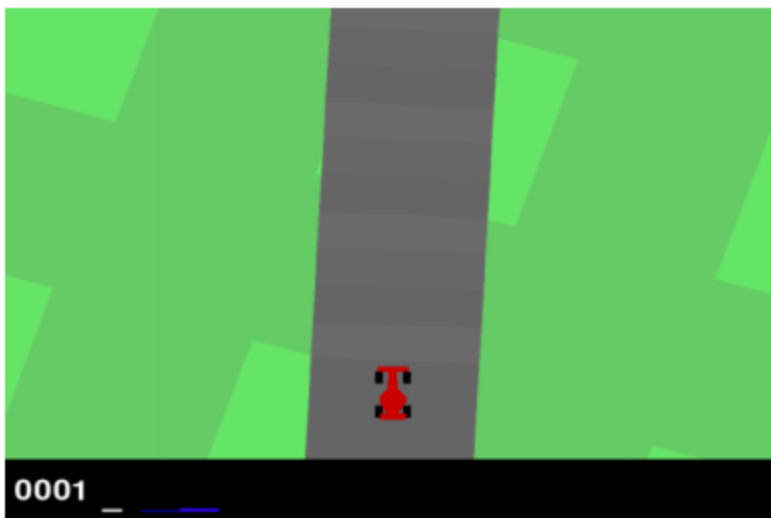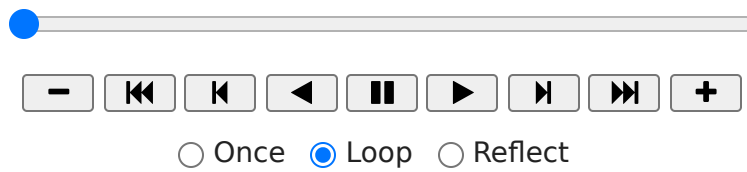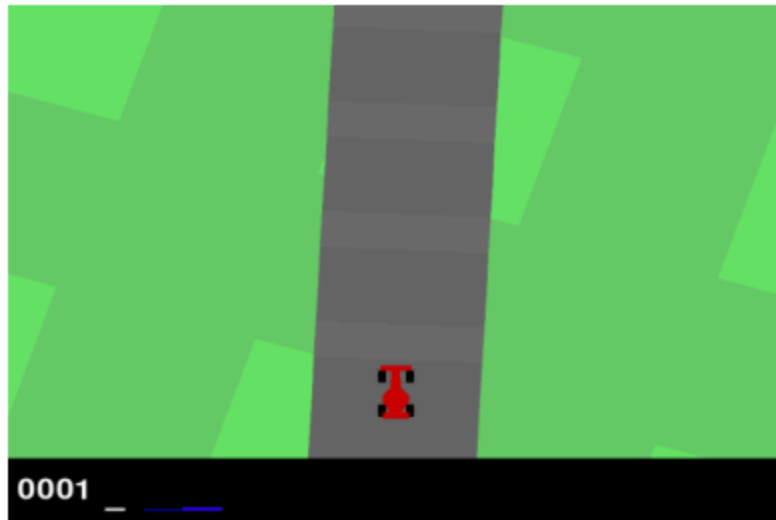Test Mean Reward: 446.53865528587494 Test Std Reward: 175.3391396087704

In [3]:
```python
img_path = os.path.join('.', 'images', 'hard_dqn_stats.png')
display(Image(filename=img_path))
```



## Animation

In [16]:
```python
total_rewards, frames = trainerHardUpdateDQN.play_episode(0, True, 42)
anim = animate(frames)
HTML(anim.to_jshtml())
```

○ Once  ◉ Loop  ○ Reflect



Soft Updates (5 points)

A more recent improvement is to use soft updates, also known as Polyak averaging, where the target network is updated with a small fraction of the current model weights every step. In other words:

$$\theta_{target} = \tau\theta_{model} + (1 - \tau)\theta_{target}$$

for some $\tau << 1$ Please implement this by implementing the `_update_model` class in `SoftUpdateDQN` in `DQN.py`.

In [10]:
```python
import torch
import utils
import DQN
import model
from env_wrapper import EnvWrapper

traineSoftUpdateDQN = DQN.SoftUpdateDQN(EnvWrapper(env),
                model.Nature_Paper_Conv,
                tau = 0.01,
                update_freq = 1,
                lr = 0.00025,
                gamma = 0.95,
                buffer_size = 100000,    # You can take smaller buffer size i
                batch_size = 32,
                loss_fn = "mse_loss",
                use_wandb = True,
                device = 'cuda',
                seed = 42,
                epsilon_scheduler = utils.exponential_decay(1, 1000,0.1),
                save_path = utils.get_save_path("DoubleDQN_SoftUpdates","./r

traineSoftUpdateDQN.train(200, 50, 30, 50, 50)
```

saving to ./runs/DoubleDQN_SoftUpdates/run0
Finishing previous runs because reinit is set to 'default'.
wandb: ERROR The nbformat package was not found. It is required to save note book history.
View run **efficient-brook-5** at: https://wandb.ai/kbaseba-ucla/racing-car-dqn/runs/40df1uhb
View project at: https://wandb.ai/kbaseba-ucla/racing-car-dqn
Synced 5 W&B file(s), 0 media file(s), 0 artifact file(s) and 0 other file(s)
Find logs at: ./wandb/run-20250604_173438-40df1uhb/logs
Tracking run with wandb version 0.20.0
Run data is saved locally in /home/tilboon/Documents/239AS_2/Project_4/wandb/run-20250604_173507-c98qmc25
Syncing run **vivid-brook-6** to Weights & Biases (docs)
View project at https://wandb.ai/kbaseba-ucla/racing-car-dqn
View run at https://wandb.ai/kbaseba-ucla/racing-car-dqn/runs/c98qmc25

Episode: 0: Time: 6.359175682067871 Total Reward: -33.848920863309544 Avg_Loss: 0.0
Episode: 1: Time: 8.767962455749512 Total Reward: -46.92307692307715 Avg_Loss: 0.7833606781331217
Episode: 2: Time: 9.387411832809448 Total Reward: -29.306569343066098 Avg_Loss: 0.7772658258488699
Episode: 3: Time: 9.651671171188354 Total Reward: -48.57142857142889 Avg_Loss: 0.8115668516574788
Episode: 4: Time: 10.046218395233154 Total Reward: -20.92592592592637 Avg_Loss: 0.7559677272909829
Episode: 5: Time: 10.012659072875977 Total Reward: -77.39436619718307 Avg_Loss: 0.7192318934728118
Episode: 6: Time: 9.452333211898804 Total Reward: -14.84732824427546 Avg_Loss: 0.7523773938980924
Episode: 7: Time: 9.38041639328003 Total Reward: -63.750000000000554 Avg_Loss: 0.7029306743638355
Episode: 8: Time: 9.65608549118042 Total Reward: -62.39130434782662 Avg_Loss: 0.6861154307149538
Episode: 9: Time: 9.332027673721313 Total Reward: -38.18181818181847 Avg_Loss: 0.7263028417565242
Episode: 10: Time: 9.829419136047363 Total Reward: -29.640522875817894 Avg_Loss: 0.776068575617646
Episode: 11: Time: 9.685279369354248 Total Reward: -48.068592057762416 Avg_Loss: 0.8432840440390992
Episode: 12: Time: 10.040468692779541 Total Reward: -22.4924471299094 Avg_Loss: 0.9710026543681362
Episode: 13: Time: 9.927687406539917 Total Reward: 85.88737201365586 Avg_Loss: 1.210566443680715
Episode: 14: Time: 9.614501953125 Total Reward: -33.983050847457775 Avg_Loss: 1.3660759304751868
Episode: 15: Time: 9.682658195495605 Total Reward: -43.5530546623803 Avg_Loss: 1.4533559619879521
Episode: 16: Time: 9.701286315917969 Total Reward: 101.49122807017751 Avg_Loss: 1.7521506163502942
Episode: 17: Time: 9.865921020507812 Total Reward: 135.508474576274 Avg_Loss: 2.1271981648286853
Episode: 18: Time: 9.575285911560059 Total Reward: -23.34890965732152 Avg_Loss: 1.9405558973300356
Episode: 19: Time: 10.124025821685791 Total Reward: 125.06472491909467 Avg_Loss: 2.338648290443821
Episode: 20: Time: 9.978367328643799 Total Reward: 130.35211267605672 Avg_Loss: 2.6769668257036128
Episode: 21: Time: 10.004230737686157 Total Reward: 151.62162162162605 Avg_Loss: 2.740618932647865
Episode: 22: Time: 9.869470357894897 Total Reward: 273.7943262411383 Avg_Loss: 2.9141142794064114
Episode: 23: Time: 9.90914249420166 Total Reward: 26.8637992831531 Avg_Loss: 2.7222721784555612
Episode: 24: Time: 9.94980502128601 Total Reward: 247.9487179487213 Avg_Loss: 2.791672555964534
Episode: 25: Time: 9.785473346710205 Total Reward: 282.28937728937746 Avg_Loss: 2.998690017381636
Episode: 26: Time: 9.756397008895874 Total Reward: 230.17482517482952 Avg_Loss: 3.0527297573931076
Episode: 27: Time: 9.902008295059204 Total Reward: 223.18181818182228 Avg_Loss: 2.9708636235289214

Episode: 28: Time: 9.911519527435303 Total Reward: 130.7053291536085 Avg_Loss: 3.0766998942659685
Episode: 29: Time: 9.761918067932129 Total Reward: 197.25352112676495 Avg_Loss: 2.8807840247114167
Episode: 30: Time: 9.700820446014404 Total Reward: 105.71684587814076 Avg_Loss: 3.26323181641202
Episode: 31: Time: 9.85072135925293 Total Reward: 36.25000000000048 Avg_Loss: 2.7935593373635235
Episode: 32: Time: 10.052670955657959 Total Reward: 76.1026615969624 Avg_Loss: 3.0351208678814543
Episode: 33: Time: 9.913760423660278 Total Reward: 166.4379084967365 Avg_Loss: 3.1833140324143803
Episode: 34: Time: 9.723971366882324 Total Reward: 126.5189873417767 Avg_Loss: 3.150880851415025
Episode: 35: Time: 9.876695156097412 Total Reward: 216.3207547169856 Avg_Loss: 3.1383642013333426
Episode: 36: Time: 9.983841896057129 Total Reward: 7.9900332225909665 Avg_Loss: 3.1697209101765096
Episode: 37: Time: 9.822298765182495 Total Reward: 266.3707165109062 Avg_Loss: 3.000276417792344
Episode: 38: Time: 9.486727952957153 Total Reward: 199.77611940298684 Avg_Loss: 3.0773827646459853
Episode: 39: Time: 9.858022212982178 Total Reward: 189.81012658228312 Avg_Loss: 2.9627301299772344
Episode: 40: Time: 9.776391983032227 Total Reward: 341.36363636363194 Avg_Loss: 3.207382644424919
Episode: 41: Time: 9.52996301651001 Total Reward: 179.80916030534854 Avg_Loss: 3.5288001564370486
Episode: 42: Time: 9.72357726097107 Total Reward: 204.34210526316204 Avg_Loss: 3.2292861986060104
Episode: 43: Time: 9.635736227035522 Total Reward: 199.54545454545814 Avg_Loss: 3.2421289602247607
Episode: 44: Time: 9.677833318710327 Total Reward: 230.42372881356243 Avg_Loss: 3.589244406764247
Episode: 45: Time: 5.585062026977539 Total Reward: -47.935616438356305 Avg_Loss: 3.3950726021738613
Episode: 46: Time: 9.655150651931763 Total Reward: 326.4285714285688 Avg_Loss: 6.927791636030213
Episode: 47: Time: 9.80740475654602 Total Reward: 135.03194888179343 Avg_Loss: 3.7365470273154124
Episode: 48: Time: 9.693898916244507 Total Reward: 115.88435374150055 Avg_Loss: 4.642089680463326
Episode: 49: Time: 9.641628503799438 Total Reward: 211.12244897959587 Avg_Loss: 3.6910098600788275
Validation Mean Reward: 136.51330664357846 Validation Std Reward: 192.55672092175595
Episode: 50: Time: 8.781256437301636 Total Reward: 155.0000000000016 Avg_Loss: 4.444873988127508
Episode: 51: Time: 8.932474613189697 Total Reward: 174.11314984709963 Avg_Loss: 4.464563330431946
Episode: 52: Time: 8.899184226989746 Total Reward: 231.53061224489994 Avg_Loss: 3.9341697662818333
Episode: 53: Time: 8.596878051757812 Total Reward: 98.54838709677597 Avg_Loss: 4.036811327233034
Episode: 54: Time: 8.623188972473145 Total Reward: -32.500000000000504 Avg_Loss: 4.3225767357008795

Episode: 55: Time: 8.595264673233032 Total Reward: 196.3669064748249 Avg_Loss: 4.247139162877026
Episode: 56: Time: 8.458593845367432 Total Reward: 277.4696356275306 Avg_Loss: 3.9663013284947692
Episode: 57: Time: 8.60712194442749 Total Reward: 367.8975265017616 Avg_Loss: 3.902098891614866
Episode: 58: Time: 8.817859411239624 Total Reward: 251.5703971119176 Avg_Loss: 4.2382583007091235
Episode: 59: Time: 8.52751088142395 Total Reward: 416.71874999999386 Avg_Loss: 4.372445583844385
Episode: 60: Time: 8.584330081939697 Total Reward: 432.47252747251923 Avg_Loss: 4.271372173513685
Episode: 61: Time: 8.777506828308105 Total Reward: 208.22580645161702 Avg_Loss: 4.964666343035818
Episode: 62: Time: 8.706783533096313 Total Reward: 324.9999999999931 Avg_Loss: 4.649392831726234
Episode: 63: Time: 8.652416944503784 Total Reward: 272.4911660777413 Avg_Loss: 4.488731570604469
Episode: 64: Time: 8.704713106155396 Total Reward: 374.79865771811393 Avg_Loss: 4.997556201049259
Episode: 65: Time: 6.977598667144775 Total Reward: -34.294936708857406 Avg_Loss: 5.018814799686273
Episode: 66: Time: 9.058687686920166 Total Reward: 224.0883190883235 Avg_Loss: 6.565468735053759
Episode: 67: Time: 8.717163324356079 Total Reward: 372.79661016948825 Avg_Loss: 6.047346511307885
Episode: 68: Time: 8.642010688781738 Total Reward: 335.6049822064028 Avg_Loss: 5.475873236395731
Episode: 69: Time: 8.551136493682861 Total Reward: 423.3673469387678 Avg_Loss: 5.211276100463226
Episode: 70: Time: 8.690770149230957 Total Reward: 597.0152091254627 Avg_Loss: 5.985399157059293
Episode: 71: Time: 8.724921464920044 Total Reward: 423.11594202898004 Avg_Loss: 5.802746419646159
Episode: 72: Time: 8.981839895248413 Total Reward: 193.40125391849966 Avg_Loss: 5.5142255064820045
Episode: 73: Time: 9.062034368515015 Total Reward: 323.0064308681567 Avg_Loss: 5.766712033948979
Episode: 74: Time: 8.97783613204956 Total Reward: 342.4999999999961 Avg_Loss: 6.773057346584416
Episode: 75: Time: 9.093238353729248 Total Reward: 226.7993079584808 Avg_Loss: 5.9324939280998805
Episode: 76: Time: 9.220790386199951 Total Reward: 214.37500000000404 Avg_Loss: 6.001623046498339
Episode: 77: Time: 8.880097150802612 Total Reward: 160.73770491803705 Avg_Loss: 6.039022809317132
Episode: 78: Time: 8.878198146820068 Total Reward: 380.86206896551266 Avg_Loss: 6.3700453022948835
Episode: 79: Time: 8.900635480880737 Total Reward: 141.666666666671 Avg_Loss: 6.540381905411472
Episode: 80: Time: 8.880651950836182 Total Reward: 317.3076923076911 Avg_Loss: 6.328245426426415
Episode: 81: Time: 8.985002040863037 Total Reward: 363.3333333333287 Avg_Loss: 6.243428697606094
Episode: 82: Time: 8.804656028747559 Total Reward: 232.46478873239914 Avg_Loss: 6.274208794120981

Episode: 83: Time: 8.676821947097778 Total Reward: 145.00000000000392 Avg_Loss: 6.163693144541829
Episode: 84: Time: 9.121578454971313 Total Reward: 169.0949554896178 Avg_Loss: 6.124674570660631
Episode: 85: Time: 9.009651899337769 Total Reward: 386.6176470588199 Avg_Loss: 6.255308812906762
Episode: 86: Time: 9.099703311920166 Total Reward: 390.34201954396707 Avg_Loss: 6.632770225781353
Episode: 87: Time: 9.040067911148071 Total Reward: 343.5964912280672 Avg_Loss: 5.933987073537682
Episode: 88: Time: 9.076050281524658 Total Reward: 333.57142857142753 Avg_Loss: 5.837284118187528
Episode: 89: Time: 8.917668104171753 Total Reward: 311.0150375939793 Avg_Loss: 5.9893299301131435
Episode: 90: Time: 9.157706022262573 Total Reward: 390.8934169278975 Avg_Loss: 5.891021738533213
Episode: 91: Time: 8.851157665252686 Total Reward: 60.03875968992677 Avg_Loss: 6.3353149961022766
Episode: 92: Time: 8.564097166061401 Total Reward: 198.04029304029655 Avg_Loss: 5.715947996668455
Episode: 93: Time: 8.902704238891602 Total Reward: 329.6575342465732 Avg_Loss: 5.826893477880654
Episode: 94: Time: 9.16528606414795 Total Reward: 372.1052631578892 Avg_Loss: 6.1401000533785135
Episode: 95: Time: 9.060025930404663 Total Reward: 433.36879432623374 Avg_Loss: 6.04397249822857
Episode: 96: Time: 9.304153680801392 Total Reward: 155.00000000000426 Avg_Loss: 6.020894598560173
Episode: 97: Time: 8.78052830696106 Total Reward: 299.366197183094 Avg_Loss: 5.930347956529184
Episode: 98: Time: 9.158217191696167 Total Reward: 216.178247734142 Avg_Loss: 6.13512929247207
Episode: 99: Time: 8.936630725860596 Total Reward: 333.07017543859183 Avg_Loss: 6.186478532662912
Validation Mean Reward: 468.2316288391237 Validation Std Reward: 164.70728540510885
Episode: 100: Time: 8.90030312538147 Total Reward: 349.06779661016714 Avg_Loss: 6.355496637460564
Episode: 101: Time: 8.818978309631348 Total Reward: 312.66550522647236 Avg_Loss: 6.088183710555069
Episode: 102: Time: 8.863079309463501 Total Reward: 328.2081911262761 Avg_Loss: 6.368436020963332
Episode: 103: Time: 8.852832078933716 Total Reward: 286.75675675675836 Avg_Loss: 6.297761362139918
Episode: 104: Time: 8.892276048660278 Total Reward: 315.59602649006126 Avg_Loss: 6.191193007621445
Episode: 105: Time: 9.028782844543457 Total Reward: 420.9010600706673 Avg_Loss: 6.383728964489047
Episode: 106: Time: 9.372996807098389 Total Reward: 364.15492957745505 Avg_Loss: 6.148156429539208
Episode: 107: Time: 8.906398296356201 Total Reward: 235.88235294118135 Avg_Loss: 6.081189411027091
Episode: 108: Time: 9.06720232963562 Total Reward: 347.56756756756425 Avg_Loss: 6.058901989159464
Episode: 109: Time: 9.074903726577759 Total Reward: 318.19444444444184 Avg_Loss: 6.383517638975833

Episode: 110: Time: 9.299425601959229 Total Reward: 269.43148688046944 Avg_Loss: 6.2037993889896805
Episode: 111: Time: 9.096110820770264 Total Reward: 343.31168831168367 Avg_Loss: 5.7615008314116665
Episode: 112: Time: 9.016019344329834 Total Reward: 342.9310344827546 Avg_Loss: 5.987511538657822
Episode: 113: Time: 9.08167815208435 Total Reward: 486.8181818181746 Avg_Loss: 5.922261649820985
Episode: 114: Time: 9.247497797012329 Total Reward: 166.53846153846425 Avg_Loss: 5.830582815058091
Episode: 115: Time: 9.126161813735962 Total Reward: 162.3289902280176 Avg_Loss: 5.872409509009674
Episode: 116: Time: 9.108531951904297 Total Reward: 308.6363636363635 Avg_Loss: 6.199760917855912
Episode: 117: Time: 9.22785234451294 Total Reward: 250.276872964173 Avg_Loss: 6.120997912743512
Episode: 118: Time: 8.984291076660156 Total Reward: 336.50684931506726 Avg_Loss: 5.924262940382757
Episode: 119: Time: 8.692239046096802 Total Reward: 308.5714285714274 Avg_Loss: 6.037426803292346
Episode: 120: Time: 8.863551616668701 Total Reward: 388.55263157894274 Avg_Loss: 5.809913339735079
Episode: 121: Time: 9.175024032592773 Total Reward: 255.00000000000313 Avg_Loss: 6.130678096739184
Episode: 122: Time: 9.261340856552124 Total Reward: 379.5222929936211 Avg_Loss: 5.8207204366932395
Episode: 123: Time: 9.247202634811401 Total Reward: 292.2053872053781 Avg_Loss: 5.673971290347957
Episode: 124: Time: 9.169139623641968 Total Reward: 433.301886792442 Avg_Loss: 5.766151232879703
Episode: 125: Time: 9.141641616821289 Total Reward: 420.15151515150785 Avg_Loss: 5.365705503636048
Episode: 126: Time: 9.2326180934906 Total Reward: 388.18042813455077 Avg_Loss: 5.816592818548699
Episode: 127: Time: 9.23341989517212 Total Reward: 357.2292993630537 Avg_Loss: 5.560486525046725
Episode: 128: Time: 9.1712167263031 Total Reward: 439.6534653465266 Avg_Loss: 5.629712339709787
Episode: 129: Time: 8.97677755355835 Total Reward: 322.5438596491206 Avg_Loss: 5.774518024019835
Episode: 130: Time: 8.933695554733276 Total Reward: 173.55123674912073 Avg_Loss: 5.325212637917335
Episode: 131: Time: 9.155580759048462 Total Reward: 334.5081967213106 Avg_Loss: 5.646345194648294
Episode: 132: Time: 9.31362795829773 Total Reward: 354.0445859872519 Avg_Loss: 5.37570827047364
Episode: 133: Time: 8.975593328475952 Total Reward: 406.7667844522911 Avg_Loss: 6.10733294086296
Episode: 134: Time: 9.141383171081543 Total Reward: 541.6782006920321 Avg_Loss: 6.047196122277684
Episode: 135: Time: 8.80656099319458 Total Reward: 403.12734082396344 Avg_Loss: 6.125536714281354
Episode: 136: Time: 8.8642737865448 Total Reward: 491.61417322833813 Avg_Loss: 6.145409863536098
Episode: 137: Time: 8.561309337615967 Total Reward: 339.2629482071595 Avg_Loss: 5.861530353041256

Episode: 138: Time: 9.221336364746094 Total Reward: 298.2926829268296 Avg_Loss: 5.824019112506835
Episode: 139: Time: 9.203903675079346 Total Reward: 273.0981595092028 Avg_Loss: 5.841262102127075
Episode: 140: Time: 9.491063833236694 Total Reward: 282.7777777777788 Avg_Loss: 6.463505304160238
Episode: 141: Time: 9.082810401916504 Total Reward: 487.7586206896485 Avg_Loss: 6.063040857054606
Episode: 142: Time: 9.238645315170288 Total Reward: 411.6666666666605 Avg_Loss: 5.589861113484166
Episode: 143: Time: 9.385120391845703 Total Reward: 215.44776119403357 Avg_Loss: 6.209480169440518
Episode: 144: Time: 9.046092748641968 Total Reward: 301.61016949152094 Avg_Loss: 5.95375902712846
Episode: 145: Time: 8.845305442810059 Total Reward: 638.6065573770344 Avg_Loss: 6.3967428227432634
Episode: 146: Time: 9.395216464996338 Total Reward: 384.41176470587726 Avg_Loss: 6.040112980273592
Episode: 147: Time: 9.097713708877563 Total Reward: 485.1282051282007 Avg_Loss: 6.06953929552511
Episode: 148: Time: 9.177312850952148 Total Reward: 428.3333333333292 Avg_Loss: 5.740354018051083
Episode: 149: Time: 9.008253574371338 Total Reward: 480.97173144875495 Avg_Loss: 5.788759528087969
Validation Mean Reward: 492.63193041175725 Validation Std Reward: 162.27548870021084
Episode: 150: Time: 9.483519792556763 Total Reward: 375.98976109214163 Avg_Loss: 5.688849335958977
Episode: 151: Time: 9.114443063735962 Total Reward: 696.6666666666538 Avg_Loss: 5.845975727594199
Episode: 152: Time: 9.465603590011597 Total Reward: 412.28862973760516 Avg_Loss: 5.962439875642793
Episode: 153: Time: 8.996148586273193 Total Reward: 498.4065934065835 Avg_Loss: 6.20971939543716
Episode: 154: Time: 9.149848937988281 Total Reward: 346.3793103448271 Avg_Loss: 6.158099134429162
Episode: 155: Time: 9.045654535293579 Total Reward: 302.2602739726029 Avg_Loss: 6.31023413193326
Episode: 156: Time: 9.057140827178955 Total Reward: 446.0447761193939 Avg_Loss: 5.78962278265913
Episode: 157: Time: 9.17162275314331 Total Reward: 351.15384615384403 Avg_Loss: 5.863099718294224
Episode: 158: Time: 8.709758758544922 Total Reward: 387.26950354609664 Avg_Loss: 6.061595663303087
Episode: 159: Time: 8.776059627532959 Total Reward: 368.2352941176398 Avg_Loss: 5.9780009524161075
Episode: 160: Time: 8.953487873077393 Total Reward: 406.73010380622156 Avg_Loss: 5.7029726825842335
Episode: 161: Time: 9.117899894714355 Total Reward: 131.3513513513555 Avg_Loss: 5.791663218446138
Episode: 162: Time: 8.887683391571045 Total Reward: 421.8918918918853 Avg_Loss: 6.05809783033964
Episode: 163: Time: 8.77006983757019 Total Reward: 271.6666666666686 Avg_Loss: 5.987795321380391
Episode: 164: Time: 8.900785684585571 Total Reward: 513.9965397923806 Avg_Loss: 6.038491510543503

Episode: 165: Time: 9.246918201446533 Total Reward: 391.1538461538396 Avg_Loss: 5.911325483762917
Episode: 166: Time: 9.123233079910278 Total Reward: 375.4049844236672 Avg_Loss: 6.092941744988706
Episode: 167: Time: 8.924655675888062 Total Reward: 519.3344709897474 Avg_Loss: 6.117993170473756
Episode: 168: Time: 8.928216934204102 Total Reward: 547.1404682274164 Avg_Loss: 5.816819082789061
Episode: 169: Time: 8.831780433654785 Total Reward: 504.31506849314377 Avg_Loss: 5.991126857885794
Episode: 170: Time: 8.656875371932983 Total Reward: 543.2113821138146 Avg_Loss: 6.41523120082727
Episode: 171: Time: 9.141057014465332 Total Reward: 367.9080118694354 Avg_Loss: 5.72494311492984
Episode: 172: Time: 8.838615894317627 Total Reward: 394.2857142857093 Avg_Loss: 5.961509667524771
Episode: 173: Time: 8.741678476333618 Total Reward: 336.73431734316955 Avg_Loss: 6.000063786987497
Episode: 174: Time: 8.608460903167725 Total Reward: 353.4126984126954 Avg_Loss: 6.0212915043870945
Episode: 175: Time: 8.75484561920166 Total Reward: 373.16479400748716 Avg_Loss: 5.9598151926232985
Episode: 176: Time: 8.829013109207153 Total Reward: 356.9572953736585 Avg_Loss: 6.222374537411858
Episode: 177: Time: 8.732270002365112 Total Reward: 484.3357933579224 Avg_Loss: 5.799065840344469
Episode: 178: Time: 8.965213537216187 Total Reward: 389.94983277591035 Avg_Loss: 6.347992421198292
Episode: 179: Time: 9.032500982284546 Total Reward: 304.33993399340113 Avg_Loss: 5.816112191737199
Episode: 180: Time: 9.248551368713379 Total Reward: 343.87147335422515 Avg_Loss: 6.18525776041656
Episode: 181: Time: 8.801539421081543 Total Reward: 637.8767123287553 Avg_Loss: 5.836492621598124
Episode: 182: Time: 8.812108278274536 Total Reward: 564.7938144329794 Avg_Loss: 6.195139836864311
Episode: 183: Time: 9.2008535861969 Total Reward: 430.8620689655119 Avg_Loss: 6.221855175595324
Episode: 184: Time: 8.66279911994934 Total Reward: 526.3991769547254 Avg_Loss: 6.192809664902567
Episode: 185: Time: 8.784388542175293 Total Reward: 613.4870848708402 Avg_Loss: 6.089628597267535
Episode: 186: Time: 8.896945714950562 Total Reward: 350.85987261145846 Avg_Loss: 6.108258275424733
Episode: 187: Time: 9.187250137329102 Total Reward: 441.36363636362375 Avg_Loss: 5.892622294546175
Episode: 188: Time: 8.87038803100586 Total Reward: 314.7222222222111 Avg_Loss: 6.472536363521544
Episode: 189: Time: 8.716774940490723 Total Reward: 274.71830985915466 Avg_Loss: 6.280903064904093
Episode: 190: Time: 8.684787511825562 Total Reward: 428.4657039711135 Avg_Loss: 6.299746735757139
Episode: 191: Time: 8.902358531951904 Total Reward: 329.6575342465748 Avg_Loss: 6.346883165736158
Episode: 192: Time: 9.003032922744751 Total Reward: 323.23899371068944 Avg_Loss: 6.25149845576086

```
Episode: 193: Time: 8.74174165725708 Total Reward: 431.31578947367507 Avg_Lo
ss: 6.178008529318481
Episode: 194: Time: 9.114672899246216 Total Reward: 384.8761609907059 Avg_Lo
ss: 6.738975046061668
Episode: 195: Time: 8.82404637336731 Total Reward: 463.62068965516164 Avg_Lo
ss: 6.3528156831484885
Episode: 196: Time: 8.81563925743103 Total Reward: 488.9416058394092 Avg_Los
s: 6.172656366805069
Episode: 197: Time: 9.235471725463867 Total Reward: 263.9743589743562 Avg_Lo
ss: 6.08975508533606
Episode: 198: Time: 8.825702905654907 Total Reward: 343.20224719100054 Avg_L
oss: 6.025180429971519
Episode: 199: Time: 9.022519826889038 Total Reward: 328.5668789808884 Avg_Lo
ss: 5.779696464538574
Validation Mean Reward: 487.9650956245007 Validation Std Reward: 134.3409266
799912
Test Mean Reward: 549.5277772028743 Test Std Reward: 156.81387356367148
```

In [13]:
```python
img_path = os.path.join('.', 'images', 'soft_dqn_stats.png')
display(Image(filename=img_path))
```



## Animation

In [14]:
```python
total_rewards, frames = traineSoftUpdateDQN.play_episode(0, True, 42)
anim = animate(frames)
HTML(anim.to_jshtml())
```
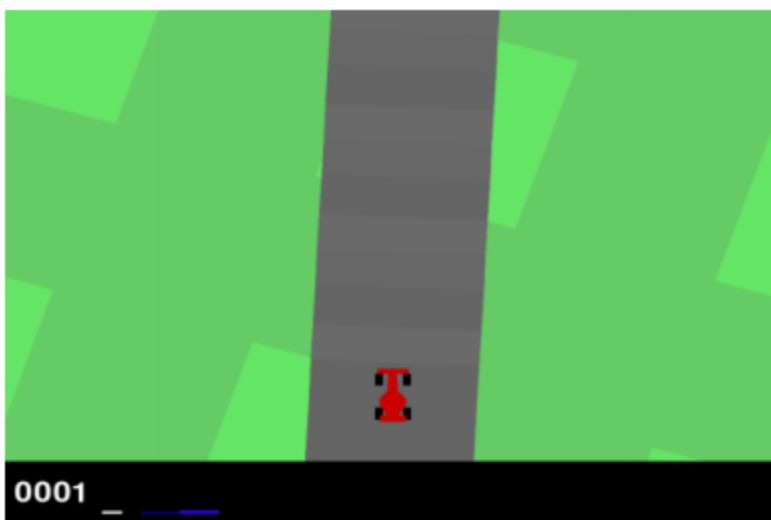
```
In [15]: img_path = os.path.join('.', 'images', 'results_summary.png')
         display(Image(filename=img_path))
```

## base_DQN:

**Validation Mean Reward:** 623.8010792168969 **Validation Std Reward:** 201.97060741012447 **Test Mean Reward:** 605.0771519145571 **Test Std Reward:** 181.9873134653002

## hard_update_DQN:

**Validation Mean Reward:** 513.33562338453 **Validation Std Reward:** 170.58048857484997 **Test Mean Reward:** 446.53865528587494 **Test Std Reward:** 175.3391396087704

## soft_update_DQN:

**Validation Mean Reward:** 487.9650956245007 **Validation Std Reward:** 134.3409266799912 **Test Mean Reward:** 549.5277772028743 **Test Std Reward:** 156.81387356367148

# Questions (10 points)

- Which method performed better? (5 points)

Your answer:

- Best overall was the base_DQN which had the highest test mean reward (605.08) albeit with somewhat higher variance.
- Among the variants, softupdateDQN performed better than hard updates on both test mean and variance which demonstrates more stable performance.

- If we modify the $\tau$ for soft updates **or** the $C$ for the hard updates, how does this affect the performance of the model, come up with a intuition for this, then experimentally verify this. (5 points)

Your answer:

Intuition:

| Update Type | Param | Small Value Effect | Large Value Effect | Paper Implication |
|---|---|---|---|---|
| Hard | $C$ | Fast, unstable | Stable, slow | Used large $C$ for stability |
| Soft | $\tau$ | Stable, slow | Fast, unstable | Not used, but similar idea |

From experiments (C sweep summary - hard update DQN):

| Param | mean_test_reward | std_test_reward | Notes |
|---|---|---|---|
| C = 20 | **Highest** | **Highest** | Learns fast, but volatile |
| C = 100 | Moderate | Moderate | Balanced, stable learning |
| C = 500 | Slightly worse | Lower std | More stable but slower |

From experiments (Tau sweep summary - hard update DQN):

| Param | mean_test_reward | std_test_reward | Notes |
|---|---|---|---|
| τ = 0.05 | **Highest** | Moderate | Fast learning, decent stability |
| τ = 0.01 | Lower | Lowest | Conservative blending |
| τ = 0.001 | Slightly better than τ=0.01 | **Highest std** | Too slow, underreactive |

Based on these results, our intuition held up:

- Hard update DQN performs best at moderate update frequency (C=100), balancing stability and learning speed; too frequent (C=20) causes instability, while too infrequent (C=500) slows convergence.
- Soft update DQN benefits from higher blending rate (τ=0.05), which accelerates learning without excessive variance; very small τ (e.g., 0.001) leads to sluggish, underresponsive updates.

## Tau Sweep Summary

```
In [18]:   img_path = os.path.join('.', 'images', 'tau_results_summary.png')
           display(Image(filename=img_path))
```

# C Sweep Sumamry

```python
img_path = os.path.join('.', 'images', 'C_results_summary.png')
display(Image(filename=img_path))
```



In [12]:

```python
import torch
import utils
import DQN
import model
from env_wrapper import EnvWrapper

trainerHardUpdateDQN = DQN.HardUpdateDQN(EnvWrapper(env),
            model.Nature_Paper_Conv,
            update_freq = 20,                    # Change this
            lr = 0.00025,
            gamma = 0.95,
            buffer_size = 100000,
            batch_size = 32,
            loss_fn = "mse_loss",
            use_wandb = True,
            device = 'cuda',
```

```
                seed = 42,
                epsilon_scheduler = utils.exponential_decay(1, 1000, 0.1),
                save_path = utils.get_save_path("DoubleDQN_HardUpdates_test/

trainerHardUpdateDQN.train(200, 50, 30, 50, 50)
```

 saving to ./runs/DoubleDQN_HardUpdates_test/run0
Finishing previous runs because reinit is set to 'default'.

**wandb**: ERROR The nbformat package was not found. It is required to save note book history.

View run **golden-sun-7** at: https://wandb.ai/kbaseba-ucla/racing-car-dqn/runs/4dulynil

View project at: https://wandb.ai/kbaseba-ucla/racing-car-dqn

Synced 5 W&B file(s), 0 media file(s), 0 artifact file(s) and 0 other file(s)

Find logs at: ./wandb/run-20250608_115956-4dulynil/logs

Tracking run with wandb version 0.20.0

Run data is saved locally in /home/tilboon/Documents/239AS_2/Project_4/wandb/run-20250608_120603-wf6uzpa1

Syncing run **lemon-gorge-8** to Weights & Biases (docs)

View project at: https://wandb.ai/kbaseba-ucla/racing-car-dqn

View run at: https://wandb.ai/kbaseba-ucla/racing-car-dqn/runs/wf6uzpa1

Episode: 0: Time: 6.5495007038116455 Total Reward: -62.625899280576135 Avg_Loss: 0.0
Episode: 1: Time: 8.952810287475586 Total Reward: -43.71794871794898 Avg_Loss: 0.655454914732154
Episode: 2: Time: 9.572886228561401 Total Reward: -32.95620437956232 Avg_Loss: 0.6020928432992777
Episode: 3: Time: 9.546243667602539 Total Reward: -41.428571428571615 Avg_Loss: 0.6830792658406646
Episode: 4: Time: 9.807853698730469 Total Reward: -27.65993265993282 Avg_Loss: 0.8070681379685382
Episode: 5: Time: 9.249284267425537 Total Reward: -49.22535211267672 Avg_Loss: 0.7828165134336768
Episode: 6: Time: 8.746994256973267 Total Reward: -45.38167938931362 Avg_Loss: 0.8369419920657363
Episode: 7: Time: 9.633396863937378 Total Reward: -59.843750000000696 Avg_Loss: 0.6991477351666999
Episode: 8: Time: 9.314960956573486 Total Reward: -47.89855072463837 Avg_Loss: 0.7516652555244059
Episode: 9: Time: 8.835227012634277 Total Reward: -23.030303030303724 Avg_Loss: 0.9756142547776719
Episode: 10: Time: 9.29691767692566 Total Reward: -29.640522875817716 Avg_Loss: 0.9804354608685029
Episode: 11: Time: 9.26706600189209 Total Reward: -51.67870036101155 Avg_Loss: 1.0688985536704545
Episode: 12: Time: 9.32113242149353 Total Reward: -40.619335347432724 Avg_Loss: 1.394059543943956
Episode: 13: Time: 9.310064554214478 Total Reward: -2.849829351536486 Avg_Loss: 1.4449641145452732
Episode: 14: Time: 9.329903602600098 Total Reward: -23.813559322034653 Avg_Loss: 1.267923413016716
Episode: 15: Time: 9.483307600021362 Total Reward: -21.045016077171116 Avg_Loss: 1.1287395877121877
Episode: 16: Time: 9.304885149002075 Total Reward: 45.350877192985386 Avg_Loss: 1.4229860897136837
Episode: 17: Time: 9.840331554412842 Total Reward: 132.11864406780097 Avg_Loss: 1.5506247407874139
Episode: 18: Time: 9.935387372970581 Total Reward: 4.68847352024922 Avg_Loss: 1.9770977775714977
Episode: 19: Time: 9.667186737060547 Total Reward: -62.63754045307509 Avg_Loss: 1.6694817968151148
Episode: 20: Time: 9.90787410736084 Total Reward: 52.88732394366508 Avg_Loss: 1.5985426185261302
Episode: 21: Time: 9.96624493598938 Total Reward: 354.3243243243212 Avg_Loss: 1.7849166542291641
Episode: 22: Time: 9.457099914550781 Total Reward: 167.41134751773538 Avg_Loss: 2.6081341922032735
Episode: 23: Time: 9.894036531448364 Total Reward: 249.0860215053798 Avg_Loss: 2.8840751991051587
Episode: 24: Time: 9.857326030731201 Total Reward: -66.1538461538468 Avg_Loss: 2.7721320475850786
Episode: 25: Time: 9.692387342453003 Total Reward: 322.5824175824173 Avg_Loss: 2.283662050461569
Episode: 26: Time: 9.788154363632202 Total Reward: 111.29370629370575 Avg_Loss: 2.26493535760571
Episode: 27: Time: 9.844635248184204 Total Reward: 191.713286713286777 Avg_Loss: 2.4261854736744857

Episode: 28: Time: 9.960933446884155 Total Reward: 158.91849529780933 Avg_Loss: 2.884026718740704
Episode: 29: Time: 9.880461692810059 Total Reward: 84.5774647887329 Avg_Loss: 3.0460202603780924
Episode: 30: Time: 9.687227725982666 Total Reward: 59.12186379928757 Avg_Loss: 3.0537342213156844
Episode: 31: Time: 9.898269653320312 Total Reward: 42.5000000000008 Avg_Loss: 3.0280169098317122
Episode: 32: Time: 9.808274269104004 Total Reward: 239.6007604562787 Avg_Loss: 3.2752720342964685
Episode: 33: Time: 9.932083368301392 Total Reward: 329.8366013071907 Avg_Loss: 3.4929613744010446
Episode: 34: Time: 10.163429021835327 Total Reward: 202.46835443038498 Avg_Loss: 3.275465806241797
Episode: 35: Time: 9.943961143493652 Total Reward: 125.12578616352641 Avg_Loss: 3.405127404116783
Episode: 36: Time: 10.004844665527344 Total Reward: 300.3488372093022 Avg_Loss: 3.4263984077617904
Episode: 37: Time: 9.9406259059906 Total Reward: 219.6417445482907 Avg_Loss: 3.612440524231486
Episode: 38: Time: 9.560728549957275 Total Reward: 285.5970149253707 Avg_Loss: 4.507235213988969
Episode: 39: Time: 9.980370998382568 Total Reward: 218.29113924051083 Avg_Loss: 4.423728868740947
Episode: 40: Time: 9.88417387008667 Total Reward: 355.90909090908417 Avg_Loss: 4.487317558096237
Episode: 41: Time: 9.654994010925293 Total Reward: 385.916030534347 Avg_Loss: 4.508713839935655
Episode: 42: Time: 9.911081552505493 Total Reward: 309.6052631578914 Avg_Loss: 4.339450985443692
Episode: 43: Time: 9.783241987228394 Total Reward: 355.9090909090895 Avg_Loss: 5.586673086430846
Episode: 44: Time: 9.830735445022583 Total Reward: 335.50847457626924 Avg_Loss: 4.281008003138695
Episode: 45: Time: 10.089322805404663 Total Reward: 315.958904109591 Avg_Loss: 4.300970805793249
Episode: 46: Time: 9.723674774169922 Total Reward: 351.4285714285685 Avg_Loss: 4.577112351645942
Episode: 47: Time: 10.035784721374512 Total Reward: 400.2076677316242 Avg_Loss: 4.965706198155379
Episode: 48: Time: 9.785735845565796 Total Reward: 177.10884353741656 Avg_Loss: 4.817072315877225
Episode: 49: Time: 9.753089904785156 Total Reward: 139.69387755102017 Avg_Loss: 5.15777806574557
Validation Mean Reward: 376.79806168108155 Validation Std Reward: 162.15430051107649
Episode: 50: Time: 9.312292575836182 Total Reward: 246.2162162162207 Avg_Loss: 4.726297724647682
Episode: 51: Time: 9.159210443496704 Total Reward: 333.13455657492085 Avg_Loss: 5.195189803087411
Episode: 52: Time: 8.899564266204834 Total Reward: 313.16326530612366 Avg_Loss: 5.7420914764163875
Episode: 53: Time: 8.632073402404785 Total Reward: 180.9856630824416 Avg_Loss: 5.164476951130298
Episode: 54: Time: 8.833472490310669 Total Reward: 397.6470588235246 Avg_Loss: 6.286344790659031

Episode: 55: Time: 8.770053386688232 Total Reward: 333.0575539568341 Avg_Loss: 6.734343190153106
Episode: 56: Time: 8.744435548782349 Total Reward: 168.15789473684652 Avg_Loss: 5.154827128939268
Episode: 57: Time: 8.724367618560791 Total Reward: 396.1660777385148 Avg_Loss: 4.738316903595163
Episode: 58: Time: 8.313927412033081 Total Reward: 85.50541516245846 Avg_Loss: 4.620431852941754
Episode: 59: Time: 8.664697170257568 Total Reward: 346.4062500000006 Avg_Loss: 4.092609975017419
Episode: 60: Time: 8.624260425567627 Total Reward: 458.11355311354225 Avg_Loss: 4.444923300703032
Episode: 61: Time: 8.959390878677368 Total Reward: 208.22580645161688 Avg_Loss: 4.204730290825627
Episode: 62: Time: 8.859929084777832 Total Reward: 448.33333333332234 Avg_Loss: 3.869640484076588
Episode: 63: Time: 8.629826307296753 Total Reward: 438.5689045936297 Avg_Loss: 4.663029445319617
Episode: 64: Time: 8.674881219863892 Total Reward: 381.5100671140887 Avg_Loss: 4.830588714415286
Episode: 65: Time: 8.940448522567749 Total Reward: 363.8607594936642 Avg_Loss: 4.994564618383135
Episode: 66: Time: 9.107543706893921 Total Reward: 443.4615384615305 Avg_Loss: 5.006062305775009
Episode: 67: Time: 8.77268123626709 Total Reward: 477.88135593219675 Avg_Loss: 5.012529585040918
Episode: 68: Time: 8.731301307678223 Total Reward: 442.366548042701 Avg_Loss: 4.357497500772236
Episode: 69: Time: 8.57067608833313 Total Reward: 586.632653061213 Avg_Loss: 5.241404844933197
Episode: 70: Time: 8.815603494644165 Total Reward: 547.5855513307906 Avg_Loss: 5.064570444471696
Episode: 71: Time: 8.840604305267334 Total Reward: 412.2463768115881 Avg_Loss: 5.264630345236354
Episode: 72: Time: 9.049682140350342 Total Reward: 365.81504702193956 Avg_Loss: 5.340474135735455
Episode: 73: Time: 9.046900510787964 Total Reward: 245.83601286173968 Avg_Loss: 5.982070214107257
Episode: 74: Time: 8.800192832946777 Total Reward: 370.2777777777753 Avg_Loss: 5.518221905251511
Episode: 75: Time: 9.028656005859375 Total Reward: 368.66782006919516 Avg_Loss: 5.167770833528342
Episode: 76: Time: 9.112618446350098 Total Reward: 379.99999999999636 Avg_Loss: 5.435021523667984
Episode: 77: Time: 9.064903497695923 Total Reward: 364.01639344261827 Avg_Loss: 4.675868606367031
Episode: 78: Time: 8.93052339553833 Total Reward: 353.2758620689642 Avg_Loss: 5.005740009936966
Episode: 79: Time: 9.037742376327515 Total Reward: 291.6666666666636 Avg_Loss: 5.010442207340433
Episode: 80: Time: 9.073769330978394 Total Reward: 120.38461538461897 Avg_Loss: 5.3990987559326555
Episode: 81: Time: 8.979736804962158 Total Reward: 369.7435897435853 Avg_Loss: 4.778115665712276
Episode: 82: Time: 8.757277250289917 Total Reward: 422.6056338028118 Avg_Loss: 5.361994026087913

Episode: 83: Time: 8.740690231323242 Total Reward: 241.6666666666695 Avg_Loss: 4.844394313688038
Episode: 84: Time: 9.028905868530273 Total Reward: 507.37388724034963 Avg_Loss: 5.485330219028377
Episode: 85: Time: 8.7088942527771 Total Reward: 618.2352941176345 Avg_Loss: 4.439107630934034
Episode: 86: Time: 8.790470361709595 Total Reward: 334.96742671009406 Avg_Loss: 5.22287832338269
Episode: 87: Time: 8.84617280960083 Total Reward: 371.6666666666593 Avg_Loss: 4.951188658465858
Episode: 88: Time: 9.0144944190979 Total Reward: 353.0519480519474 Avg_Loss: 4.965974067439552
Episode: 89: Time: 8.862312078475952 Total Reward: 435.07518796991116 Avg_Loss: 5.376831813519742
Episode: 90: Time: 9.088538646697998 Total Reward: 303.1191222570494 Avg_Loss: 5.878577851447739
Episode: 91: Time: 8.677466869354248 Total Reward: 373.9922480620108 Avg_Loss: 5.384941730679584
Episode: 92: Time: 8.746922492980957 Total Reward: 549.6886446886349 Avg_Loss: 5.1039762171376655
Episode: 93: Time: 8.7941312789917 Total Reward: 524.8630136986222 Avg_Loss: 5.056091501933186
Episode: 94: Time: 8.964143991470337 Total Reward: 497.10526315788644 Avg_Loss: 5.78759402787986
Episode: 95: Time: 9.0098717212677 Total Reward: 461.737588652475 Avg_Loss: 4.84402595347717
Episode: 96: Time: 9.249739646911621 Total Reward: 355.6172839506156 Avg_Loss: 5.271173203692717
Episode: 97: Time: 8.923067808151245 Total Reward: 436.6901408450597 Avg_Loss: 5.4071093226681235
Episode: 98: Time: 9.256075859069824 Total Reward: 270.5589123867046 Avg_Loss: 5.226254833846533
Episode: 99: Time: 9.088696241378784 Total Reward: 452.3684210526226 Avg_Loss: 5.455139267845314
Validation Mean Reward: 563.1704624908373 Validation Std Reward: 112.9437492163582
Episode: 100: Time: 9.175991296768188 Total Reward: 189.74576271186888 Avg_Loss: 5.625657477298705
Episode: 101: Time: 9.045287132263184 Total Reward: 364.93031358884355 Avg_Loss: 5.7727654441064145
Episode: 102: Time: 9.133816242218018 Total Reward: 464.7269624573265 Avg_Loss: 5.691650607505767
Episode: 103: Time: 9.02588176727295 Total Reward: 303.6486486486431 Avg_Loss: 5.931471967396616
Episode: 104: Time: 9.087037324905396 Total Reward: 358.64238410595647 Avg_Loss: 5.10028039657769
Episode: 105: Time: 9.090594291687012 Total Reward: 378.49823321554436 Avg_Loss: 5.1675359020714
Episode: 106: Time: 9.312061786651611 Total Reward: 431.7605633802747 Avg_Loss: 5.218024882949701
Episode: 107: Time: 8.822723388671875 Total Reward: 452.7941176470533 Avg_Loss: 6.10216859609139
Episode: 108: Time: 8.979605436325073 Total Reward: 587.432432432424 Avg_Loss: 6.109134253333597
Episode: 109: Time: 9.101206064224243 Total Reward: 248.75000000000145 Avg_Loss: 5.827900310524371

Episode: 110: Time: 9.350907802581787 Total Reward: 161.5597767638528 Avg_Loss: 5.778121238997002
Episode: 111: Time: 9.11279010772705 Total Reward: 340.0649350649344 Avg_Loss: 5.398849215327191
Episode: 112: Time: 8.999662160873413 Total Reward: 380.8620689655113 Avg_Loss: 5.3346634872821195
Episode: 113: Time: 8.86205768585205 Total Reward: 206.81818181818596 Avg_Loss: 5.4340534385512855
Episode: 114: Time: 9.120033740997314 Total Reward: 206.53846153846553 Avg_Loss: 5.9793353311154025
Episode: 115: Time: 9.068922281265259 Total Reward: 501.0912052117196 Avg_Loss: 5.137741150976229
Episode: 116: Time: 8.813103914260864 Total Reward: 337.72727272727195 Avg_Loss: 5.255498219938839
Episode: 117: Time: 8.978428363800049 Total Reward: 214.4462540716658 Avg_Loss: 5.806656791382477
Episode: 118: Time: 8.81026029586792 Total Reward: 387.87671232875994 Avg_Loss: 5.547824719372918
Episode: 119: Time: 8.731915950775146 Total Reward: 508.5714285714171 Avg_Loss: 6.229006130655272
Episode: 120: Time: 8.770632028579712 Total Reward: 414.86842105262787 Avg_Loss: 5.742734715718181
Episode: 121: Time: 9.07791781425476 Total Reward: 419.7058823529335 Avg_Loss: 5.670873563329713
Episode: 122: Time: 9.034256935119629 Total Reward: 465.5095541401133 Avg_Loss: 5.577330562246948
Episode: 123: Time: 9.021939277648926 Total Reward: 295.5723905723843 Avg_Loss: 5.57174618805156
Episode: 124: Time: 8.923874855041504 Total Reward: 530.7861635220012 Avg_Loss: 5.487766927029906
Episode: 125: Time: 8.801369667053223 Total Reward: 319.1414141414166 Avg_Loss: 5.74230088606602
Episode: 126: Time: 8.905743598937988 Total Reward: 333.13455657491903 Avg_Loss: 5.3411065400147635
Episode: 127: Time: 8.98410677909851 Total Reward: 274.42675159234847 Avg_Loss: 6.29606388897455
Episode: 128: Time: 8.90984058380127 Total Reward: 350.54455445544113 Avg_Loss: 5.732430378929908
Episode: 129: Time: 8.69679880142212 Total Reward: 522.5438596491148 Avg_Loss: 5.53923446490985
Episode: 130: Time: 8.749695539474487 Total Reward: 583.445229681969 Avg_Loss: 5.584022810479172
Episode: 131: Time: 8.929392576217651 Total Reward: 459.09836065573 Avg_Loss: 5.822902506139098
Episode: 132: Time: 9.021062850952148 Total Reward: 264.87261146496985 Avg_Loss: 5.616636204118488
Episode: 133: Time: 8.618757486343384 Total Reward: 424.4346289752594 Avg_Loss: 5.854095436444803
Episode: 134: Time: 8.837188959121704 Total Reward: 406.7301038062186 Avg_Loss: 5.4884401369495555
Episode: 135: Time: 8.621813535690308 Total Reward: 358.1835205992434 Avg_Loss: 5.204802545178838
Episode: 136: Time: 8.673527956008911 Total Reward: 853.8188976377841 Avg_Loss: 6.0595745900098015
Episode: 137: Time: 8.592684745788574 Total Reward: 486.673306772902 Avg_Loss: 6.09539388458268

Episode: 138: Time: 9.170080423355103 Total Reward: 484.2682926829189 Avg_Loss: 5.750886100680888
Episode: 139: Time: 8.99093508720398 Total Reward: 365.12269938650195 Avg_Loss: 6.117053145120124
Episode: 140: Time: 9.292836666107178 Total Reward: 346.6666666666607 Avg_Loss: 5.611735011850085
Episode: 141: Time: 8.828991651535034 Total Reward: 484.31034482757775 Avg_Loss: 5.85176264939188
Episode: 142: Time: 9.030216932296753 Total Reward: 501.6666666666574 Avg_Loss: 5.839071276808987
Episode: 143: Time: 9.201725721359253 Total Reward: 319.92537313432695 Avg_Loss: 6.134836316108704
Episode: 144: Time: 8.839284658432007 Total Reward: 338.89830508473875 Avg_Loss: 6.0243308123420265
Episode: 145: Time: 8.683513402938843 Total Reward: 564.8360655737574 Avg_Loss: 5.785106777143078
Episode: 146: Time: 9.341193199157715 Total Reward: 499.1176470588143 Avg_Loss: 5.490948895446393
Episode: 147: Time: 9.074527740478516 Total Reward: 417.82051282050793 Avg_Loss: 6.078458813058228
Episode: 148: Time: 9.171911478042603 Total Reward: 528.3333333333211 Avg_Loss: 5.8246965423351575
Episode: 149: Time: 9.049257516860962 Total Reward: 378.4982332155387 Avg_Loss: 5.284171712498705
Validation Mean Reward: 475.74485229204504 Validation Std Reward: 211.1280351266616
Episode: 150: Time: 9.455951690673828 Total Reward: 416.94539249146254 Avg_Loss: 5.6597360432648856
Episode: 151: Time: 9.274663925170898 Total Reward: 476.9696969696909 Avg_Loss: 6.213148237276478
Episode: 152: Time: 9.412887573242188 Total Reward: 208.20699708455106 Avg_Loss: 6.432444860454367
Episode: 153: Time: 8.942827463150024 Total Reward: 571.6666666666586 Avg_Loss: 6.348932544223401
Episode: 154: Time: 9.127218008041382 Total Reward: 460.1724137930977 Avg_Loss: 5.56984365487299
Episode: 155: Time: 9.083600759506226 Total Reward: 288.56164383561315 Avg_Loss: 6.004022382888474
Episode: 156: Time: 9.098911762237549 Total Reward: 502.01492537312697 Avg_Loss: 5.746527579652161
Episode: 157: Time: 9.077198028564453 Total Reward: 169.6153846153885 Avg_Loss: 6.018673110408943
Episode: 158: Time: 8.935819387435913 Total Reward: 518.4751773049586 Avg_Loss: 5.434718360420034
Episode: 159: Time: 8.880932092666626 Total Reward: 397.6470588235231 Avg_Loss: 6.029916905555405
Episode: 160: Time: 9.13607144355774 Total Reward: 486.3148788927235 Avg_Loss: 6.062339624436963
Episode: 161: Time: 9.218574523925781 Total Reward: 418.51351351350985 Avg_Loss: 5.245007499927232
Episode: 162: Time: 9.075580596923828 Total Reward: 269.8648648648677 Avg_Loss: 6.514530604126072
Episode: 163: Time: 9.109979391098022 Total Reward: 488.33333333332223 Avg_Loss: 5.979726872524293
Episode: 164: Time: 9.067340850830078 Total Reward: 486.31487889272614 Avg_Loss: 5.827657920973642

Episode: 165: Time: 9.432322978973389 Total Reward: 360.38461538460604 Avg_Loss: 6.214004869721517
Episode: 166: Time: 9.178732872009277 Total Reward: 534.2834890965626 Avg_Loss: 7.3079368757600545
Episode: 167: Time: 9.19777226448059 Total Reward: 423.7713310580111 Avg_Loss: 6.774131379708522
Episode: 168: Time: 9.09201455116272 Total Reward: 500.3177257525025 Avg_Loss: 6.630632963501105
Episode: 169: Time: 9.066387414932251 Total Reward: 343.3561643835604 Avg_Loss: 6.031928031384444
Episode: 170: Time: 8.991393327713013 Total Reward: 531.0162601625879 Avg_Loss: 5.949311156232818
Episode: 171: Time: 9.33280324935913 Total Reward: -3.0118694362024083 Avg_Loss: 5.9842137258593775
Episode: 172: Time: 9.114694118499756 Total Reward: 590.7142857142743 Avg_Loss: 5.711179994735398
Episode: 173: Time: 8.994828224182129 Total Reward: 499.09594095940224 Avg_Loss: 5.87244689564745
Episode: 174: Time: 8.893805742263794 Total Reward: 615.3174603174494 Avg_Loss: 5.599986789106321
Episode: 175: Time: 9.00933313369751 Total Reward: 826.3483146067322 Avg_Loss: 5.94033504834696
Episode: 176: Time: 9.15973448753357 Total Reward: 595.391459074724 Avg_Loss: 5.89575094735923
Episode: 177: Time: 9.070490598678589 Total Reward: 628.2472324723176 Avg_Loss: 6.7693416641539885
Episode: 178: Time: 9.305131912231445 Total Reward: 359.84949832775476 Avg_Loss: 6.0214857454059505
Episode: 179: Time: 9.260103464126587 Total Reward: 479.25742574256924 Avg_Loss: 6.315702683785382
Episode: 180: Time: 9.540346145629883 Total Reward: 312.5235109717791 Avg_Loss: 6.721808438541508
Episode: 181: Time: 8.951114654541016 Total Reward: 651.575342465743 Avg_Loss: 6.179653552399964
Episode: 182: Time: 9.023867130279541 Total Reward: 547.6116838487935 Avg_Loss: 6.049509453172443
Episode: 183: Time: 9.413198471069336 Total Reward: 272.81609195401387 Avg_Loss: 6.1105186748905345
Episode: 184: Time: 8.820467948913574 Total Reward: 509.93827160493083 Avg_Loss: 6.494148974659062
Episode: 185: Time: 9.031449794769287 Total Reward: 650.387453874529 Avg_Loss: 6.452501959159594
Episode: 186: Time: 9.496684789657593 Total Reward: 427.2929936305645 Avg_Loss: 6.522313643904293
Episode: 187: Time: 9.415345191955566 Total Reward: 404.9999999999937 Avg_Loss: 7.05122645061557
Episode: 188: Time: 9.147208213806152 Total Reward: 502.2222222222121 Avg_Loss: 6.277145289573349
Episode: 189: Time: 9.179821014404297 Total Reward: 545.8450704225239 Avg_Loss: 6.659776904001958
Episode: 190: Time: 8.973827600479126 Total Reward: 266.01083032491255 Avg_Loss: 6.169942862847272
Episode: 191: Time: 9.324206352233887 Total Reward: 305.6849315068482 Avg_Loss: 6.523924737417397
Episode: 192: Time: 9.245073318481445 Total Reward: 269.7798742138383 Avg_Loss: 6.584982914083144

```
Episode: 193: Time: 9.061000108718872 Total Reward: 442.5939849624005 Avg_Lo
ss: 7.013026714324951
Episode: 194: Time: 9.383429050445557 Total Reward: 428.2198142414835 Avg_Lo
ss: 7.568753500946429
Episode: 195: Time: 9.190256595611572 Total Reward: 470.51724137929637 Avg_L
oss: 6.755424574643624
Episode: 196: Time: 9.157865762710571 Total Reward: 419.5985401459824 Avg_Lo
ss: 7.006165170869908
Episode: 197: Time: 9.459447860717773 Total Reward: 204.145299145304 Avg_Los
s: 6.930825941702899
Episode: 198: Time: 9.065754175186157 Total Reward: 635.3370786516743 Avg_Lo
ss: 7.33348697373847
Episode: 199: Time: 9.326997756958008 Total Reward: 280.7961783439492 Avg_Lo
ss: 7.329927698904727
Validation Mean Reward: 667.1884506460161 Validation Std Reward: 163.5763818
2437205
Test Mean Reward: 615.0866983203043 Test Std Reward: 181.67272041497947
```

In [13]:
```python
trainerHardUpdateDQN = DQN.HardUpdateDQN(EnvWrapper(env),
                        model.Nature_Paper_Conv,
                        update_freq = 500,                         # Change this
                        lr = 0.00025,
                        gamma = 0.95,
                        buffer_size = 100000,
                        batch_size = 32,
                        loss_fn = "mse_loss",
                        use_wandb = True,
                        device = 'cuda',
                        seed = 42,
                        epsilon_scheduler = utils.exponential_decay(1, 1000, 0.1),
                        save_path = utils.get_save_path("DoubleDQN_HardUpdates_test/

trainerHardUpdateDQN.train(200, 50, 30, 50, 50)
```

```
saving to ./runs/DoubleDQN_HardUpdates_test/run1
Finishing previous runs because reinit is set to 'default'.
```

## Run history:

| | |
|---|---|
| loss | ▁▁▁▂▆▇███▇▇▇▇▇▇▇█ |
| mean_reward | ▁▁█ |
| mean_test_reward | ▁ |
| std_reward | ▁▁█ |
| std_test_reward | ▁ |
| total_reward | ▁▂▅▆▇▆▇▇▆▇▆▇▇▇▇█ |

## Run summary:

| | |
|---|---|
| loss | 7.32993 |
| mean_reward | 667.18845 |
| mean_test_reward | 615.0867 |
| std_reward | 163.57638 |
| std_test_reward | 181.67272 |
| total_reward | 280.79618 |

View run **lemon-gorge-8** at: https://wandb.ai/kbaseba-ucla/racing-car-dqn/runs/wf6uzpa1

View project at: https://wandb.ai/kbaseba-ucla/racing-car-dqn

Synced 5 W&B file(s), 0 media file(s), 0 artifact file(s) and 0 other file(s)

Find logs at: ./wandb/run-20250608_120603-wf6uzpa1/logs

Tracking run with wandb version 0.20.0

Run data is saved locally in /home/tilboon/Documents/239AS_2/Project_4/wandb/run-20250608_130613-j8bv0sy5

Syncing run **polar-snowball-9** to Weights & Biases (docs)

View project at https://wandb.ai/kbaseba-ucla/racing-car-dqn

View run at https://wandb.ai/kbaseba-ucla/racing-car-dqn/runs/j8bv0sy5

Episode: 0: Time: 6.4389026165008545 Total Reward: -52.031250000000355 Avg_Loss: 0.0
Episode: 1: Time: 8.255250930786133 Total Reward: -31.39575971731456 Avg_Loss: 0.7503820823588568
Episode: 2: Time: 8.446129560470581 Total Reward: -30.018050541516196 Avg_Loss: 0.9030566392701214
Episode: 3: Time: 8.575628519058228 Total Reward: -61.777408637874416 Avg_Loss: 0.7929545947734047
Episode: 4: Time: 8.874367952346802 Total Reward: -62.21311475409895 Avg_Loss: 0.6885187760339815
Episode: 5: Time: 8.308270692825317 Total Reward: -32.69470404984493 Avg_Loss: 0.7193250393322786
Episode: 6: Time: 8.785995721817017 Total Reward: -40.255474452555205 Avg_Loss: 0.6230055453380993
Episode: 7: Time: 8.85183048248291 Total Reward: -76.07255520504734 Avg_Loss: 0.5502683583240048
Episode: 8: Time: 8.453720569610596 Total Reward: -28.333333333333783 Avg_Loss: 0.609753114069585
Episode: 9: Time: 8.93119192123413 Total Reward: 10.431309904152254 Avg_Loss: 0.5872186506088791
Episode: 10: Time: 8.756636619567871 Total Reward: -57.06896551724209 Avg_Loss: 0.6360740925365386
Episode: 11: Time: 9.088459968566895 Total Reward: 94.60244648318341 Avg_Loss: 0.6494725785773843
Episode: 12: Time: 8.619980573654175 Total Reward: 85.64516129032583 Avg_Loss: 0.7254321983694529
Episode: 13: Time: 8.178656339645386 Total Reward: -52.894736842105914 Avg_Loss: 0.7065953154022954
Episode: 14: Time: 8.790500402450562 Total Reward: 16.782477341389598 Avg_Loss: 0.7206518024581821
Episode: 15: Time: 8.151129722595215 Total Reward: -23.31541218638067 Avg_Loss: 0.6803926380366838
Episode: 16: Time: 8.215713024139404 Total Reward: -17.178988326848778 Avg_Loss: 0.7411864735968724
Episode: 17: Time: 9.105412006378174 Total Reward: 1.3855421686740428 Avg_Loss: 0.658576260375626
Episode: 18: Time: 8.943377494812012 Total Reward: 52.39884393063487 Avg_Loss: 0.7845273032596632
Episode: 19: Time: 8.635081768035889 Total Reward: 267.59541984731777 Avg_Loss: 0.8970033222762477
Episode: 20: Time: 8.745373725891113 Total Reward: 37.075471698114995 Avg_Loss: 0.9536759690577242
Episode: 21: Time: 8.909645318984985 Total Reward: 113.07453416149343 Avg_Loss: 0.9308270411644163
Episode: 22: Time: 8.613789796829224 Total Reward: 432.55905511810096 Avg_Loss: 1.1908370278963523
Episode: 23: Time: 8.76596736907959 Total Reward: 125.1492537313477 Avg_Loss: 1.3503276608696504
Episode: 24: Time: 8.57244324684143 Total Reward: 226.67832167832591 Avg_Loss: 1.4928266106783843
Episode: 25: Time: 8.492033243179321 Total Reward: 136.9391634981026 Avg_Loss: 1.5238783766492074
Episode: 26: Time: 8.745815515518188 Total Reward: 41.18677042801822 Avg_Loss: 1.6012702897316267
Episode: 27: Time: 8.710015535354614 Total Reward: 459.34782608695195 Avg_Loss: 1.6722903855207587

Episode: 28: Time: 8.557602882385254 Total Reward: 8.806228373701645 Avg_Loss: 1.6337596179307008
Episode: 29: Time: 8.523100852966309 Total Reward: 15.687022900763038 Avg_Loss: 1.9579324306560164
Episode: 30: Time: 8.52834677696228 Total Reward: 234.41176470588397 Avg_Loss: 1.718363927066827
Episode: 31: Time: 8.631817102432251 Total Reward: -36.605839416058856 Avg_Loss: 2.0488568672112057
Episode: 32: Time: 8.816261053085327 Total Reward: 97.72727272727688 Avg_Loss: 2.1250939324122515
Episode: 33: Time: 8.746047019958496 Total Reward: 595.0369003689955 Avg_Loss: 2.3316052912914453
Episode: 34: Time: 8.917491912841797 Total Reward: 33.37837837837956 Avg_Loss: 2.3205370159209275
Episode: 35: Time: 8.718326568603516 Total Reward: 168.88888888889323 Avg_Loss: 2.50243496419001
Episode: 36: Time: 8.639442920684814 Total Reward: 343.4057971014438 Avg_Loss: 2.378616181491804
Episode: 37: Time: 8.743472337722778 Total Reward: 220.78947368421342 Avg_Loss: 2.737858040242636
Episode: 38: Time: 8.643094301223755 Total Reward: 147.10526315789866 Avg_Loss: 2.640550151592543
Episode: 39: Time: 8.513446569442749 Total Reward: 154.1582491582534 Avg_Loss: 2.931183828776624
Episode: 40: Time: 8.700028896331787 Total Reward: 192.71929824561482 Avg_Loss: 2.716281865324293
Episode: 41: Time: 8.761762857437134 Total Reward: 278.98373983739873 Avg_Loss: 2.848226918893702
Episode: 42: Time: 8.951642751693726 Total Reward: 212.16723549488492 Avg_Loss: 3.0264076938649187
Episode: 43: Time: 8.73553204536438 Total Reward: 143.59649122807326 Avg_Loss: 3.3743660364832198
Episode: 44: Time: 8.783403873443604 Total Reward: 116.72638436482461 Avg_Loss: 3.2453789039820182
Episode: 45: Time: 8.832040071487427 Total Reward: 196.9463087248351 Avg_Loss: 3.293572170894687
Episode: 46: Time: 8.768513917922974 Total Reward: 3.3050847457626666 Avg_Loss: 3.2602851881700405
Episode: 47: Time: 8.928743124008179 Total Reward: 408.24675324674485 Avg_Loss: 3.308495701611543
Episode: 48: Time: 8.572720766067505 Total Reward: 543.4615384615325 Avg_Loss: 3.5660885782802807
Episode: 49: Time: 8.73019552230835 Total Reward: 199.7761194029885 Avg_Loss: 3.6786377925832734
Validation Mean Reward: 308.80541492418496 Validation Std Reward: 192.87331113915556
Episode: 50: Time: 8.96383023262024 Total Reward: 306.8987341772157 Avg_Loss: 3.9369510199342455
Episode: 51: Time: 9.097306728363037 Total Reward: 276.42857142857224 Avg_Loss: 3.969771259973029
Episode: 52: Time: 8.670980215072632 Total Reward: 439.79853479852886 Avg_Loss: 4.198375666341862
Episode: 53: Time: 8.824498414993286 Total Reward: 236.16883116883463 Avg_Loss: 3.8009322445933558
Episode: 54: Time: 8.888934135437012 Total Reward: 350.57823129251426 Avg_Loss: 4.201924719229466

Episode: 55: Time: 8.649335384368896 Total Reward: 217.50000000000443 Avg_Loss: 4.043002549339743
Episode: 56: Time: 8.901369094848633 Total Reward: 331.2820512820494 Avg_Loss: 4.155640004061851
Episode: 57: Time: 8.756320714950562 Total Reward: 282.2241992882573 Avg_Loss: 4.172755420207977
Episode: 58: Time: 9.091580867767334 Total Reward: 237.29813664596705 Avg_Loss: 4.17998033862154
Episode: 59: Time: 9.157258987426758 Total Reward: 261.90235690235147 Avg_Loss: 3.899202047275896
Episode: 60: Time: 8.972252368927002 Total Reward: 260.7046979865729 Avg_Loss: 4.366603489182577
Episode: 61: Time: 8.809324502944946 Total Reward: 318.3858267716523 Avg_Loss: 4.317523904207374
Episode: 62: Time: 8.959850311279297 Total Reward: 493.0398671096244 Avg_Loss: 4.65768139903285
Episode: 63: Time: 8.919708967208862 Total Reward: 302.5155279503108 Avg_Loss: 4.74199727102488
Episode: 64: Time: 9.087061882019043 Total Reward: 245.62500000000438 Avg_Loss: 4.743659382106877
Episode: 65: Time: 8.787028789520264 Total Reward: 522.8571428571348 Avg_Loss: 4.8720313110271425
Episode: 66: Time: 8.899693250656128 Total Reward: 306.9933554817272 Avg_Loss: 5.648883237558253
Episode: 67: Time: 8.737599611282349 Total Reward: 275.74829931972124 Avg_Loss: 4.876691952973855
Episode: 68: Time: 8.78323769569397 Total Reward: 424.57295373664664 Avg_Loss: 4.882070067049074
Episode: 69: Time: 8.673351764678955 Total Reward: 285.13698630136304 Avg_Loss: 5.128196862565369
Episode: 70: Time: 8.953622579574585 Total Reward: 506.91082802546754 Avg_Loss: 5.4938379315768975
Episode: 71: Time: 8.79429292678833 Total Reward: 465.7843137254881 Avg_Loss: 5.2126343230239485
Episode: 72: Time: 9.069419860839844 Total Reward: 214.85915492958168 Avg_Loss: 5.348371759182265
Episode: 73: Time: 8.82794451713562 Total Reward: 97.72727272727664 Avg_Loss: 5.278079893909583
Episode: 74: Time: 8.928473472595215 Total Reward: 175.35830618892896 Avg_Loss: 4.95597223524286
Episode: 75: Time: 8.698085308074951 Total Reward: 428.80952380951703 Avg_Loss: 5.297351434451191
Episode: 76: Time: 8.75436520576477 Total Reward: 24.13357400722159 Avg_Loss: 5.157387792062359
Episode: 77: Time: 8.867250680923462 Total Reward: 156.61290322580695 Avg_Loss: 5.382217375671162
Episode: 78: Time: 9.028779745101929 Total Reward: 101.8253968253982 Avg_Loss: 5.600969541974428
Episode: 79: Time: 8.837549686431885 Total Reward: 278.7373737373746 Avg_Loss: 5.558953583741388
Episode: 80: Time: 8.902163982391357 Total Reward: 413.53242320818373 Avg_Loss: 5.318848365495185
Episode: 81: Time: 8.761207818984985 Total Reward: 105.68027210884371 Avg_Loss: 5.703598594966055
Episode: 82: Time: 8.873214960098267 Total Reward: 251.5346534653489 Avg_Loss: 5.269073863991168

Episode: 83: Time: 8.787366151809692 Total Reward: 413.5324232081833 Avg_Loss: 5.759369785044374
Episode: 84: Time: 8.777789115905762 Total Reward: 505.7326007325937 Avg_Loss: 5.735346744541361
Episode: 85: Time: 8.821728229522705 Total Reward: 268.32179930795223 Avg_Loss: 5.1897350369381305
Episode: 86: Time: 8.768955945968628 Total Reward: 363.9041095890372 Avg_Loss: 5.332773652397284
Episode: 87: Time: 2.9660143852233887 Total Reward: -68.67414965986427 Avg_Loss: 5.299276261102586
Episode: 88: Time: 9.26429533958435 Total Reward: 110.60747663551435 Avg_Loss: 5.436146127576587
Episode: 89: Time: 8.91404128074646 Total Reward: 454.3421052631532 Avg_Loss: 5.455363784016681
Episode: 90: Time: 8.862672567367554 Total Reward: 367.40601503759166 Avg_Loss: 5.523359656333923
Episode: 91: Time: 8.848169326782227 Total Reward: 336.5789473684166 Avg_Loss: 7.499766533114329
Episode: 92: Time: 9.18509817123413 Total Reward: 207.4691358024739 Avg_Loss: 5.680491362299238
Episode: 93: Time: 8.867718696594238 Total Reward: 208.03030303030764 Avg_Loss: 7.239896753755938
Episode: 94: Time: 8.95173978805542 Total Reward: 341.4820846905474 Avg_Loss: 5.952149255936887
Episode: 95: Time: 4.971399784088135 Total Reward: -15.486138613859538 Avg_Loss: 6.0562012107933265
Episode: 96: Time: 9.133865594863892 Total Reward: 171.4576802507869 Avg_Loss: 5.701533408725963
Episode: 97: Time: 8.792855739593506 Total Reward: 228.741007194249 Avg_Loss: 5.860407322394748
Episode: 98: Time: 9.228764772415161 Total Reward: 322.9104477611941 Avg_Loss: 5.703316621419762
Episode: 99: Time: 8.741441249847412 Total Reward: 325.195439739412 Avg_Loss: 5.6725949038978385
Validation Mean Reward: 399.953492478727 Validation Std Reward: 103.92373208145169
Episode: 100: Time: 9.559770107269287 Total Reward: 401.64429530200823 Avg_Loss: 9.542456163578674
Episode: 101: Time: 9.135803461074829 Total Reward: 369.5390070921955 Avg_Loss: 10.14269595586953
Episode: 102: Time: 8.748307704925537 Total Reward: 148.24324324324758 Avg_Loss: 5.902889458071284
Episode: 103: Time: 9.367921352386475 Total Reward: 139.0425531914924 Avg_Loss: 6.969742566597562
Episode: 104: Time: 9.106154203414917 Total Reward: 421.5562913907214 Avg_Loss: 8.414267972236923
Episode: 105: Time: 9.006991147994995 Total Reward: 442.87878787878174 Avg_Loss: 5.8561245032719205
Episode: 106: Time: 8.838223457336426 Total Reward: 689.5528455284452 Avg_Loss: 6.419700958147771
Episode: 107: Time: 9.122624158859253 Total Reward: 340.81081081080754 Avg_Loss: 6.365661749819748
Episode: 108: Time: 9.0559401512146 Total Reward: 433.0528052805246 Avg_Loss: 5.858990708319079
Episode: 109: Time: 9.366560459136963 Total Reward: 290.5799373040736 Avg_Loss: 5.95559626266736

Episode: 110: Time: 9.023941040039062 Total Reward: 284.79094076655304 Avg_Loss: 6.491036235785284
Episode: 111: Time: 9.108924150466919 Total Reward: 316.5755627009614 Avg_Loss: 6.073557118407819
Episode: 112: Time: 9.001177787780762 Total Reward: 425.1342281879173 Avg_Loss: 5.878028917713325
Episode: 113: Time: 4.197131872177124 Total Reward: -80.31036789297718 Avg_Loss: 5.892341864209215
Episode: 114: Time: 9.027549743652344 Total Reward: 380.2475247524716 Avg_Loss: 6.117070763051009
Episode: 115: Time: 8.951233863830566 Total Reward: 336.5068493150623 Avg_Loss: 5.954145828215014
Episode: 116: Time: 8.763563871383667 Total Reward: 325.0743494423716 Avg_Loss: 6.583058362247563
Episode: 117: Time: 8.902001857757568 Total Reward: 325.8754208754161 Avg_Loss: 6.251108603818076
Episode: 118: Time: 8.879004955291748 Total Reward: 435.68592057761094 Avg_Loss: 6.310373771090467
Episode: 119: Time: 8.568905115127563 Total Reward: 105.00000000000317 Avg_Loss: 6.346694855129018
Episode: 120: Time: 8.933384656906128 Total Reward: 483.7671232876668 Avg_Loss: 5.795152756346374
Episode: 121: Time: 9.003633499145508 Total Reward: 360.12820512820093 Avg_Loss: 5.796678053230798
Episode: 122: Time: 9.093908309936523 Total Reward: 257.9411764705838 Avg_Loss: 6.019389757589132
Episode: 123: Time: 9.092081785202026 Total Reward: 388.76623376623087 Avg_Loss: 6.167869306412063
Episode: 124: Time: 8.994673013687134 Total Reward: 515.5263157894676 Avg_Loss: 6.119218816276358
Episode: 125: Time: 8.962742328643799 Total Reward: 598.3797909407556 Avg_Loss: 5.968296114136191
Episode: 126: Time: 9.110531091690063 Total Reward: 369.6153846153795 Avg_Loss: 5.9150729479909945
Episode: 127: Time: 9.132225513458252 Total Reward: 332.1186440677867 Avg_Loss: 6.159886123252516
Episode: 128: Time: 8.839430570602417 Total Reward: 395.56603773584726 Avg_Loss: 5.84495517285932
Episode: 129: Time: 8.951565504074097 Total Reward: 503.6622073578539 Avg_Loss: 6.183743254477236
Episode: 130: Time: 9.263639450073242 Total Reward: 442.95379537953227 Avg_Loss: 8.447138345542074
Episode: 131: Time: 9.205625772476196 Total Reward: 244.74358974358293 Avg_Loss: 6.9202536099097305
Episode: 132: Time: 9.005797624588013 Total Reward: 275.6293706293605 Avg_Loss: 6.309264933862606
Episode: 133: Time: 8.86644721031189 Total Reward: 560.5555555555427 Avg_Loss: 6.6000614106154245
Episode: 134: Time: 9.246344089508057 Total Reward: 404.999999999994 Avg_Loss: 6.233511380287779
Episode: 135: Time: 8.701882123947144 Total Reward: 145.00000000000432 Avg_Loss: 7.2314020806000014
Episode: 136: Time: 8.901700735092163 Total Reward: 569.4736842105164 Avg_Loss: 6.776984288912861
Episode: 137: Time: 8.778560638427734 Total Reward: 444.5189003436351 Avg_Loss: 7.470519756068702

Episode: 138: Time: 8.978103399276733 Total Reward: 348.39622641508686 Avg_Loss: 7.101317074118542
Episode: 139: Time: 9.019516706466675 Total Reward: 370.67164179104054 Avg_Loss: 7.422649572877323
Episode: 140: Time: 8.87307095527649 Total Reward: 386.4814814814756 Avg_Loss: 7.388053959157286
Episode: 141: Time: 9.17137885093689 Total Reward: 343.87147335423145 Avg_Loss: 7.413561042617349
Episode: 142: Time: 8.836299419403076 Total Reward: 478.7051792828612 Avg_Loss: 7.547081336253831
Episode: 143: Time: 9.087306499481201 Total Reward: 406.69491525423456 Avg_Loss: 7.550261470450073
Episode: 144: Time: 8.974781036376953 Total Reward: 492.59124087590226 Avg_Loss: 7.601143587537172
Episode: 145: Time: 9.30847978591919 Total Reward: 343.0952380952359 Avg_Loss: 7.635033052508571
Episode: 146: Time: 9.134598016738892 Total Reward: 220.2542372881376 Avg_Loss: 7.478524926329861
Episode: 147: Time: 9.131514310836792 Total Reward: 595.4024767801782 Avg_Loss: 7.7643446050772145
Episode: 148: Time: 9.070313930511475 Total Reward: 623.7499999999874 Avg_Loss: 7.490222710521281
Episode: 149: Time: 8.98642349243164 Total Reward: 495.27777777777106 Avg_Loss: 7.457038367495818
Validation Mean Reward: 509.00265141542593 Validation Std Reward: 173.32193682814162
Episode: 150: Time: 9.444414138793945 Total Reward: 508.38983050846457 Avg_Loss: 7.764348589071707
Episode: 151: Time: 8.913782835006714 Total Reward: 418.51351351350604 Avg_Loss: 7.443209107182607
Episode: 152: Time: 8.96460747718811 Total Reward: 255.16835016834006 Avg_Loss: 7.017907185714786
Episode: 153: Time: 8.903270483016968 Total Reward: 508.6363636363543 Avg_Loss: 6.912559228784898
Episode: 154: Time: 8.77627944946289 Total Reward: 358.90070921985324 Avg_Loss: 7.115573615587058
Episode: 155: Time: 8.837299823760986 Total Reward: 365.78431372547897 Avg_Loss: 6.983125225836489
Episode: 156: Time: 8.786910772323608 Total Reward: 401.42857142856235 Avg_Loss: 7.007669453861332
Episode: 157: Time: 8.698958396911621 Total Reward: 596.7562724014226 Avg_Loss: 7.372478809677252
Episode: 158: Time: 8.959820985794067 Total Reward: 677.0588235294005 Avg_Loss: 7.2097254680986165
Episode: 159: Time: 8.954644441604614 Total Reward: 511.0606060605973 Avg_Loss: 7.322837492998908
Episode: 160: Time: 8.913387537002563 Total Reward: 366.81818181816834 Avg_Loss: 7.137689558397822
Episode: 161: Time: 8.946526050567627 Total Reward: 444.7350993377444 Avg_Loss: 7.458194183702228
Episode: 162: Time: 9.125279188156128 Total Reward: 227.2591362126267 Avg_Loss: 7.787750853209936
Episode: 163: Time: 9.280099868774414 Total Reward: 369.05228758169375 Avg_Loss: 8.116740091508175
Episode: 164: Time: 9.155835628509521 Total Reward: 432.77777777777305 Avg_Loss: 8.060613038159218

Episode: 165: Time: 9.168130159378052 Total Reward: 403.3606557377032 Avg_Loss: 7.6325031949692415
Episode: 166: Time: 9.248130559921265 Total Reward: 483.61635220124896 Avg_Loss: 8.00687194972479
Episode: 167: Time: 9.076822996139526 Total Reward: 564.6491228070048 Avg_Loss: 7.86160772387721
Episode: 168: Time: 9.073077917098999 Total Reward: 318.37386018236015 Avg_Loss: 7.346193640171981
Episode: 169: Time: 9.1148362159729 Total Reward: 629.9070631970125 Avg_Loss: 7.333574999280336
Episode: 170: Time: 9.073678493499756 Total Reward: 415.3448275862029 Avg_Loss: 7.215462563418541
Episode: 171: Time: 9.155794858932495 Total Reward: 370.5172413793081 Avg_Loss: 6.846945997045822
Episode: 172: Time: 8.945671319961548 Total Reward: 331.5232974910399 Avg_Loss: 7.162883289721834
Episode: 173: Time: 9.187593460083008 Total Reward: 587.4324324324211 Avg_Loss: 6.784620489392962
Episode: 174: Time: 9.163450717926025 Total Reward: 536.067961165037 Avg_Loss: 6.914489320346287
Episode: 175: Time: 9.022217512130737 Total Reward: 243.70967741935652 Avg_Loss: 7.836787996171903
Episode: 176: Time: 8.867122650146484 Total Reward: 123.30985915493375 Avg_Loss: 7.433313488960266
Episode: 177: Time: 9.216876745223999 Total Reward: 440.16819571864914 Avg_Loss: 7.811799956970856
Episode: 178: Time: 8.929874181747437 Total Reward: 619.8014440433145 Avg_Loss: 7.281484885376041
Episode: 179: Time: 9.04206657409668 Total Reward: 553.8294314381201 Avg_Loss: 7.10034277960032
Episode: 180: Time: 8.899816989898682 Total Reward: 740.2059925093529 Avg_Loss: 7.4507116289699775
Episode: 181: Time: 9.142321586608887 Total Reward: 555.6849315068409 Avg_Loss: 7.868258554394505
Episode: 182: Time: 9.208608388900757 Total Reward: 234.07348242811457 Avg_Loss: 7.330141170686033
Episode: 183: Time: 8.878854513168335 Total Reward: 330.08710801392766 Avg_Loss: 7.551546584658262
Episode: 184: Time: 9.078736305236816 Total Reward: 554.9999999999897 Avg_Loss: 7.854627152450946
Episode: 185: Time: 9.15530514717102 Total Reward: 504.99999999999034 Avg_Loss: 7.513438275882176
Episode: 186: Time: 9.100300312042236 Total Reward: 589.2105263157791 Avg_Loss: 7.7216315690208885
Episode: 187: Time: 8.997204780578613 Total Reward: 490.18518518517726 Avg_Loss: 7.6643460999016
Episode: 188: Time: 9.108789443969727 Total Reward: 691.666666666657 Avg_Loss: 7.477719801814616
Episode: 189: Time: 8.923763036727905 Total Reward: 532.4509803921495 Avg_Loss: 7.521722342787671
Episode: 190: Time: 8.96717619895935 Total Reward: 423.27242524916335 Avg_Loss: 7.1623254323206025
Episode: 191: Time: 8.888558387756348 Total Reward: 207.08333333333826 Avg_Loss: 7.012135899367452
Episode: 192: Time: 8.914247751235962 Total Reward: 292.5432525951522 Avg_Loss: 6.838759916169303

```
Episode: 193: Time: 9.114394187927246 Total Reward: 304.3902439024409 Avg_Lo
ss: 6.558910922843869
Episode: 194: Time: 9.194780588150024 Total Reward: 483.61635220124845 Avg_L
oss: 7.0837289736050515
Episode: 195: Time: 9.031086444854736 Total Reward: 251.15384615384247 Avg_L
oss: 6.922670248175869
Episode: 196: Time: 9.175132513046265 Total Reward: 406.5974440894551 Avg_Lo
ss: 6.82564138464567
Episode: 197: Time: 8.831825971603394 Total Reward: 641.059479553895 Avg_Los
s: 6.861193116973428
Episode: 198: Time: 9.296360731124878 Total Reward: 528.417721518976 Avg_Los
s: 6.389542445415208
Episode: 199: Time: 9.182455062866211 Total Reward: 544.1752577319517 Avg_Lo
ss: 6.282278945466049
Validation Mean Reward: 503.15601352258574 Validation Std Reward: 227.350554
88897302
Test Mean Reward: 506.88676710695654 Test Std Reward: 150.87997229532925
```

In [14]:
```python
traineSoftUpdateDQN = DQN.SoftUpdateDQN(EnvWrapper(env),
                  model.Nature_Paper_Conv,
                  tau = 0.001,                          # Change this
                  update_freq = 1,
                  lr = 0.00025,
                  gamma = 0.95,
                  buffer_size = 100000,
                  batch_size = 32,
                  loss_fn = "mse_loss",
                  use_wandb = True,
                  device = 'cuda',
                  seed = 42,
                  epsilon_scheduler = utils.exponential_decay(1, 1000,0.1),
                  save_path = utils.get_save_path("DoubleDQN_SoftUpdates_test"

traineSoftUpdateDQN.train(200, 50, 30, 50, 50)
```

```
saving to ./runs/DoubleDQN_SoftUpdates_test/run0
Finishing previous runs because reinit is set to 'default'.

wandb: ERROR The nbformat package was not found. It is required to save note
book history.
```

## Run history:

| | |
|---|---|
| loss | ▁▁▃▅▅▅▇▅▅▇▇▇▇▇ |
| mean_reward | ▁▃█ |
| mean_test_reward | ▁ |
| std_reward | ▃▁▅ |
| std_test_reward | ▁ |
| total_reward | ▁▂▃▃▄▃▂▃▃▂▃▂▃▃▃▃▃ |

## Run summary:

| | |
|---|---|
| loss | 6.28228 |
| mean_reward | 503.15601 |
| mean_test_reward | 506.88677 |
| std_reward | 227.35055 |
| std_test_reward | 150.87997 |
| total_reward | 544.17526 |

View run **polar-snowball-9** at: https://wandb.ai/kbaseba-ucla/racing-car-dqn/runs/j8bv0sy5

View project at: https://wandb.ai/kbaseba-ucla/racing-car-dqn

Synced 5 W&B file(s), 0 media file(s), 0 artifact file(s) and 0 other file(s)

Find logs at: ./wandb/run-20250608_130613-j8bv0sy5/logs

Tracking run with wandb version 0.20.0

Run data is saved locally in /home/tilboon/Documents/239AS_2/Project_4/wandb/run-20250608_143427-op4iy3re

Syncing run **rare-music-10** to Weights & Biases (docs)

View project at https://wandb.ai/kbaseba-ucla/racing-car-dqn

View run at https://wandb.ai/kbaseba-ucla/racing-car-dqn/runs/op4iy3re

Episode: 0: Time: 6.517987012863159 Total Reward: -33.110749185668126 Avg_Loss: 0.0
Episode: 1: Time: 7.89872670173645 Total Reward: -36.37931034482813 Avg_Loss: 0.7851506260455035
Episode: 2: Time: 8.406813859939575 Total Reward: -52.894736842105694 Avg_Loss: 0.7723749261192915
Episode: 3: Time: 7.627444505691528 Total Reward: -150.57936507936546 Avg_Loss: 0.7820082961572944
Episode: 4: Time: 8.5784752368927 Total Reward: -59.70588235294164 Avg_Loss: 5.518818340882533
Episode: 5: Time: 8.780124187469482 Total Reward: -35.74074074074096 Avg_Loss: 1.8013605856015777
Episode: 6: Time: 8.761979818344116 Total Reward: -40.76271186440751 Avg_Loss: 1.4816426527099449
Episode: 7: Time: 8.791294574737549 Total Reward: -74.31034482758632 Avg_Loss: 0.6449806437585033
Episode: 8: Time: 9.162508726119995 Total Reward: -41.02272727272788 Avg_Loss: 0.6105091005657651
Episode: 9: Time: 8.279945373535156 Total Reward: -48.73665480427111 Avg_Loss: 0.5733335452122974
Episode: 10: Time: 4.0604541301727295 Total Reward: -87.2475728155345 Avg_Loss: 0.5731748041549796
Episode: 11: Time: 8.413454532623291 Total Reward: -58.36996336996401 Avg_Loss: 6.155274676863386
Episode: 12: Time: 8.865975856781006 Total Reward: -35.298507462686985 Avg_Loss: 1.2802112975603892
Episode: 13: Time: 8.626904487609863 Total Reward: -31.93693693693762 Avg_Loss: 3.1157351944032086
Episode: 14: Time: 8.994204998016357 Total Reward: -37.95302013422889 Avg_Loss: 1.2262572649115024
Episode: 15: Time: 8.59404730796814 Total Reward: -73.33935018050563 Avg_Loss: 1.7025969403506327
Episode: 16: Time: 8.83869481086731 Total Reward: -66.73144876325152 Avg_Loss: 0.9387197666840643
Episode: 17: Time: 2.5893099308013916 Total Reward: -55.181250000000304 Avg_Loss: 0.8022984611625606
Episode: 18: Time: 8.60946774482727 Total Reward: -32.67705382436333 Avg_Loss: 3.073452651735489
Episode: 19: Time: 8.456228971481323 Total Reward: -19.39862542955393 Avg_Loss: 2.0617988645529546
Episode: 20: Time: 9.285467386245728 Total Reward: -38.85964912280774 Avg_Loss: 1.3439402021780735
Episode: 21: Time: 8.557771682739258 Total Reward: -45.16611295681136 Avg_Loss: 1.2497807737408566
Episode: 22: Time: 8.205527305603027 Total Reward: 47.34875444840226 Avg_Loss: 1.155052278347376
Episode: 23: Time: 2.9363057613372803 Total Reward: -65.76219081272126 Avg_Loss: 0.8559398705431496
Episode: 24: Time: 9.178642988204956 Total Reward: 14.540636042403662 Avg_Loss: 4.961100143763949
Episode: 25: Time: 8.336953401565552 Total Reward: -27.8621908127216 Avg_Loss: 2.710484579956832
Episode: 26: Time: 8.804186344146729 Total Reward: -14.708029197080894 Avg_Loss: 1.834161223233247
Episode: 27: Time: 8.608407020568848 Total Reward: 14.848484848483857 Avg_Loss: 2.061193415002913

Episode: 28: Time: 6.344376802444458 Total Reward: -81.18066914498118 Avg_Loss: 3.122769036872239
Episode: 29: Time: 8.502626895904541 Total Reward: -28.12101910828097 Avg_Loss: 2.6663702936889995
Episode: 30: Time: 3.3635952472686768 Total Reward: -85.03086419753129 Avg_Loss: 2.4562880610848996
Episode: 31: Time: 9.579005718231201 Total Reward: 73.11594202898989 Avg_Loss: 4.355222101659835
Episode: 32: Time: 8.967965126037598 Total Reward: -35.397350993378225 Avg_Loss: 3.08605646246559
Episode: 33: Time: 4.661568880081177 Total Reward: -91.67341772151953 Avg_Loss: 2.8642523208489785
Episode: 34: Time: 8.824270248413086 Total Reward: -34.297124600639705 Avg_Loss: 1.2039457387408288
Episode: 35: Time: 7.468776702880859 Total Reward: -114.85873015873071 Avg_Loss: 1.297338062932469
Episode: 36: Time: 6.392802953720093 Total Reward: -110.60417827298095 Avg_Loss: 3.7508960936455367
Episode: 37: Time: 8.817289590835571 Total Reward: 25.437956204378708 Avg_Loss: 2.4056795520567094
Episode: 38: Time: 8.988691091537476 Total Reward: -9.179104477612084 Avg_Loss: 2.9149884203088883
Episode: 39: Time: 8.462157011032104 Total Reward: 50.66929133858654 Avg_Loss: 2.209058712072232
Episode: 40: Time: 8.555100202560425 Total Reward: -32.304075235110446 Avg_Loss: 1.6133782704274695
Episode: 41: Time: 8.434928894042969 Total Reward: -34.71631205673833 Avg_Loss: 1.5523683160793882
Episode: 42: Time: 8.55157470703125 Total Reward: 8.58565737051862 Avg_Loss: 1.0518532904381512
Episode: 43: Time: 8.546396017074585 Total Reward: -36.780821917808936 Avg_Loss: 1.3177424684761703
Episode: 44: Time: 8.936720371246338 Total Reward: -33.08049535603783 Avg_Loss: 1.1752360825810362
Episode: 45: Time: 8.750353336334229 Total Reward: -3.08823529411856 Avg_Loss: 1.1914309178236402
Episode: 46: Time: 8.392256736755371 Total Reward: -33.11074918566848 Avg_Loss: 0.7892094627335793
Episode: 47: Time: 9.207422971725464 Total Reward: -29.027777777778486 Avg_Loss: 0.8087933770060038
Episode: 48: Time: 8.354970455169678 Total Reward: 41.51877133106104 Avg_Loss: 1.0428775866758548
Episode: 49: Time: 9.20979928970337 Total Reward: -38.03797468354503 Avg_Loss: 0.8431559107227236
Validation Mean Reward: -30.395542588485878 Validation Std Reward: 35.249983303610755
Episode: 50: Time: 2.5512702465057373 Total Reward: -69.65280235988229 Avg_Loss: 0.8448163924308923
Episode: 51: Time: 8.596171617507935 Total Reward: 54.60629921260235 Avg_Loss: 1.5621256378455823
Episode: 52: Time: 8.477054834365845 Total Reward: 46.22137404580468 Avg_Loss: 1.0773265699879462
Episode: 53: Time: 8.840584516525269 Total Reward: 65.27874564460113 Avg_Loss: 1.0643694870674811
Episode: 54: Time: 8.746686697006226 Total Reward: 285.2816901408432 Avg_Loss: 1.1013203216638385

Episode: 55: Time: 8.965197801589966 Total Reward: -31.305732484077105 Avg_Loss: 1.1149191288512295
Episode: 56: Time: 8.752743244171143 Total Reward: 71.07773851590551 Avg_Loss: 0.9149605137836031
Episode: 57: Time: 8.560729026794434 Total Reward: -21.17449664429604 Avg_Loss: 1.1706459996830516
Episode: 58: Time: 8.736500978469849 Total Reward: 29.08759124087819 Avg_Loss: 1.1797618339730411
Episode: 59: Time: 8.63001823425293 Total Reward: 16.91335740072188 Avg_Loss: 1.1156484010402394
Episode: 60: Time: 8.656843423843384 Total Reward: -39.44444444444514 Avg_Loss: 1.366432961045193
Episode: 61: Time: 8.57627820968628 Total Reward: 142.5886524822744 Avg_Loss: 1.3999129339050846
Episode: 62: Time: 9.07403016090393 Total Reward: 167.34567901235008 Avg_Loss: 1.3096264031629603
Episode: 63: Time: 9.175196647644043 Total Reward: 173.29268292683298 Avg_Loss: 1.3561335961733545
Episode: 64: Time: 9.181767702102661 Total Reward: 318.33333333332473 Avg_Loss: 1.359421288704171
Episode: 65: Time: 8.766611337661743 Total Reward: 174.78417266187543 Avg_Loss: 1.3818133976153966
Episode: 66: Time: 8.889705419540405 Total Reward: 194.0365448505026 Avg_Loss: 1.5251703956986176
Episode: 67: Time: 8.853414297103882 Total Reward: 28.52941176470729 Avg_Loss: 1.3811524383911566
Episode: 68: Time: 8.980798721313477 Total Reward: 364.99999999999324 Avg_Loss: 1.3680101309535133
Episode: 69: Time: 9.423115730285645 Total Reward: 109.67836257310285 Avg_Loss: 1.3324687889143199
Episode: 70: Time: 9.288426637649536 Total Reward: 393.2154882154789 Avg_Loss: 1.523715219953481
Episode: 71: Time: 9.020573854446411 Total Reward: 316.96013289035614 Avg_Loss: 1.6482161964688982
Episode: 72: Time: 8.670556545257568 Total Reward: 834.9610894941513 Avg_Loss: 1.6566407242242027
Episode: 73: Time: 8.661933898925781 Total Reward: 689.38661710036 Avg_Loss: 1.7840057524437665
Episode: 74: Time: 9.187336921691895 Total Reward: 261.0371517027793 Avg_Loss: 2.1845736336432586
Episode: 75: Time: 8.773205757141113 Total Reward: 411.9930069929986 Avg_Loss: 1.9527600480227911
Episode: 76: Time: 8.941222667694092 Total Reward: 99.52887537994351 Avg_Loss: 2.2367359675279186
Episode: 77: Time: 9.017112493515015 Total Reward: 378.684210526312 Avg_Loss: 2.3142987254287015
Episode: 78: Time: 9.139372825622559 Total Reward: 459.38596491227014 Avg_Loss: 2.24416000602626
Episode: 79: Time: 9.178406000137329 Total Reward: 65.40955631399751 Avg_Loss: 2.100681341996714
Episode: 80: Time: 9.107641696929932 Total Reward: 421.5562913907244 Avg_Loss: 2.4464964468439088
Episode: 81: Time: 8.741514921188354 Total Reward: 248.6426116838406 Avg_Loss: 2.411141144628284
Episode: 82: Time: 8.930920839309692 Total Reward: 232.64505119453395 Avg_Loss: 2.4928486920705364

Episode: 83: Time: 9.185783624649048 Total Reward: 301.7213114753995 Avg_Loss: 2.3302837630279924
Episode: 84: Time: 8.978396654129028 Total Reward: 48.812709030103214 Avg_Loss: 2.386736288917165
Episode: 85: Time: 8.96529245376587 Total Reward: 663.2781456953567 Avg_Loss: 2.6775375900148344
Episode: 86: Time: 8.805817604064941 Total Reward: 722.8438661709902 Avg_Loss: 2.7402261699698554
Episode: 87: Time: 8.94369387626648 Total Reward: 487.1917808219083 Avg_Loss: 3.1315693682482264
Episode: 88: Time: 8.66255784034729 Total Reward: 258.8461538461441 Avg_Loss: 2.6272487880802955
Episode: 89: Time: 8.487017631530762 Total Reward: 256.25448028672554 Avg_Loss: 2.6942917904933963
Episode: 90: Time: 8.747597455978394 Total Reward: 142.45819397993782 Avg_Loss: 2.8162439687161887
Episode: 91: Time: 9.322379350662231 Total Reward: 288.3333333333335 Avg_Loss: 2.9239785344410345
Episode: 92: Time: 9.063215255737305 Total Reward: 398.24324324323874 Avg_Loss: 2.9655535797111128
Episode: 93: Time: 9.1397864818573 Total Reward: 299.23076923076013 Avg_Loss: 3.1471211320462347
Episode: 94: Time: 8.954813718795776 Total Reward: 575.0680272108776 Avg_Loss: 3.243391263885658
Episode: 95: Time: 9.008143424987793 Total Reward: 584.7153024910975 Avg_Loss: 3.3149573084186104
Episode: 96: Time: 9.473471403121948 Total Reward: 165.58631921824562 Avg_Loss: 3.6435212933716654
Episode: 97: Time: 9.491592645645142 Total Reward: 568.2302405498194 Avg_Loss: 3.2763205588865683
Episode: 98: Time: 9.113019704818726 Total Reward: 573.9895470383158 Avg_Loss: 3.2391942849680153
Episode: 99: Time: 8.636539459228516 Total Reward: 156.7730496453949 Avg_Loss: 3.102412067791995
Validation Mean Reward: 454.26080010167226 Validation Std Reward: 223.5620900201326
Episode: 100: Time: 9.28870153427124 Total Reward: 379.04844290656627 Avg_Loss: 3.3026807051496347
Episode: 101: Time: 9.251375675201416 Total Reward: 454.01960784313235 Avg_Loss: 3.4858227822960925
Episode: 102: Time: 9.069865226745605 Total Reward: 513.843537414956 Avg_Loss: 3.5525216382591664
Episode: 103: Time: 9.063061952590942 Total Reward: 635.3370786516746 Avg_Loss: 3.4396573565587274
Episode: 104: Time: 9.019737720489502 Total Reward: 515.1694915254114 Avg_Loss: 3.402727768200786
Episode: 105: Time: 9.454664945602417 Total Reward: 474.07894736841155 Avg_Loss: 3.572247917411708
Episode: 106: Time: 9.2510404586792 Total Reward: 508.77358490564905 Avg_Loss: 3.61997254280483
Episode: 107: Time: 9.045000076293945 Total Reward: 406.7421602787431 Avg_Loss: 3.9296244898764026
Episode: 108: Time: 9.255696535110474 Total Reward: 422.96407185628186 Avg_Loss: 3.6150570058522105
Episode: 109: Time: 8.964823484420776 Total Reward: 420.35836177473743 Avg_Loss: 3.7626925055720224

Episode: 110: Time: 9.548035621643066 Total Reward: 358.41614906831694 Avg_Loss: 4.05441308948172 3
Episode: 111: Time: 9.129107475280762 Total Reward: 141.84210526316173 Avg_Loss: 3.909037183062369
Episode: 112: Time: 9.20482325553894 Total Reward: 92.50000000000392 Avg_Loss: 3.89728384583938
Episode: 113: Time: 8.996813297271729 Total Reward: 473.70229007632855 Avg_Loss: 4.073739424973977
Episode: 114: Time: 8.90030813217163 Total Reward: 678.9463601532473 Avg_Loss: 3.8067799420917736
Episode: 115: Time: 9.136903047561646 Total Reward: 460.92105263157225 Avg_Loss: 3.7114007250100625
Episode: 116: Time: 9.119772672653198 Total Reward: 450.1505016722304 Avg_Loss: 4.6282954278613335
Episode: 117: Time: 9.182605028152466 Total Reward: 470.37102473497913 Avg_Loss: 4.088028818619351
Episode: 118: Time: 9.479071378707886 Total Reward: 234.03225806452014 Avg_Loss: 4.100485504174433
Episode: 119: Time: 9.25711989402771 Total Reward: 410.6179775280872 Avg_Loss: 4.128257314197156
Episode: 120: Time: 9.209830284118652 Total Reward: 529.1379310344713 Avg_Loss: 4.394224421567276
Episode: 121: Time: 9.110737085342407 Total Reward: 522.3285198555856 Avg_Loss: 4.633405098394186
Episode: 122: Time: 9.304264783859253 Total Reward: 408.0674846625718 Avg_Loss: 4.405876796786525
Episode: 123: Time: 9.52597951889038 Total Reward: 347.1364985163172 Avg_Loss: 4.721594299588885
Episode: 124: Time: 9.194671392440796 Total Reward: 426.4285714285676 Avg_Loss: 5.026639160989713
Episode: 125: Time: 8.944711208343506 Total Reward: 430.4237288135582 Avg_Loss: 4.30609350294626
Episode: 126: Time: 8.883428812026978 Total Reward: 654.9999999999883 Avg_Loss: 4.777582610354704
Episode: 127: Time: 8.949157476425171 Total Reward: 208.3333333333373 Avg_Loss: 4.859015448253696
Episode: 128: Time: 9.001689672470093 Total Reward: 197.06349206349552 Avg_Loss: 5.050806759285326
Episode: 129: Time: 9.017389059066772 Total Reward: 252.22222222222632 Avg_Loss: 5.319938200862468
Episode: 130: Time: 9.048270225524902 Total Reward: 452.4452554744458 Avg_Loss: 5.236895769083199
Episode: 131: Time: 9.259659051895142 Total Reward: 291.9863013698598 Avg_Loss: 4.748771575569105
Episode: 132: Time: 9.427180051803589 Total Reward: 321.40378548895893 Avg_Loss: 4.716913819313049
Episode: 133: Time: 8.80291485786438 Total Reward: 520.9999999999955 Avg_Loss: 5.16191780717433
Episode: 134: Time: 9.02002215385437 Total Reward: 116.22112211221537 Avg_Loss: 5.409420298177655
Episode: 135: Time: 8.903197288513184 Total Reward: 431.6903914590704 Avg_Loss: 5.074378925211289
Episode: 136: Time: 9.180867910385132 Total Reward: 384.5918367346901 Avg_Loss: 5.139073545692348
Episode: 137: Time: 9.282783269882202 Total Reward: 311.8965517241377 Avg_Loss: 5.61262704194093

Episode: 138: Time: 8.976841449737549 Total Reward: 368.70967741935334 Avg_Loss: 5.146897232332149
Episode: 139: Time: 9.194902181625366 Total Reward: 446.40127388534137 Avg_Loss: 5.221278950446794
Episode: 140: Time: 9.025276184082031 Total Reward: 389.94983277591587 Avg_Loss: 5.5969773751347
Episode: 141: Time: 8.869401693344116 Total Reward: 453.38709677419087 Avg_Loss: 6.0143230427213075
Episode: 142: Time: 8.974151372909546 Total Reward: 432.02702702702015 Avg_Loss: 5.96090510061809
Episode: 143: Time: 9.187320947647095 Total Reward: 395.13157894735855 Avg_Loss: 5.28618519496517
Episode: 144: Time: 9.192233562469482 Total Reward: 416.78451178450484 Avg_Loss: 5.496456217865984
Episode: 145: Time: 9.319454193115234 Total Reward: 429.4755244755207 Avg_Loss: 5.602028929385819
Episode: 146: Time: 9.17629861831665 Total Reward: 155.85910652921297 Avg_Loss: 5.29569058658696
Episode: 147: Time: 9.01144814491272 Total Reward: 465.43956043955 Avg_Loss: 5.597525611645033
Episode: 148: Time: 8.744663715362549 Total Reward: 421.5289256198314 Avg_Loss: 5.93818889746145
Episode: 149: Time: 8.963855266571045 Total Reward: 286.4814814814747 Avg_Loss: 6.24158089601693
Validation Mean Reward: 391.2284518133914 Validation Std Reward: 142.9146211749332
Episode: 150: Time: 9.814082145690918 Total Reward: 243.70967741935812 Avg_Loss: 5.7365383891498345
Episode: 151: Time: 9.350341558456421 Total Reward: 496.3621262458365 Avg_Loss: 5.595381116165834
Episode: 152: Time: 9.142569303512573 Total Reward: 337.5259515570873 Avg_Loss: 5.5067505340616245
Episode: 153: Time: 9.199182987213135 Total Reward: 398.1034482758548 Avg_Loss: 6.179093718528748
Episode: 154: Time: 9.215584516525269 Total Reward: 457.8169014084449 Avg_Loss: 5.800200292543203
Episode: 155: Time: 8.805477619171143 Total Reward: 479.0740740740648 Avg_Loss: 5.706302278682966
Episode: 156: Time: 9.116844415664673 Total Reward: 263.49056603773727 Avg_Loss: 5.750262961167247
Episode: 157: Time: 9.178764820098877 Total Reward: 362.2368421052579 Avg_Loss: 6.2516690672946575
Episode: 158: Time: 9.194191932678223 Total Reward: 370.51724137930125 Avg_Loss: 5.955229728161788
Episode: 159: Time: 9.15082836151123 Total Reward: 90.05338078292243 Avg_Loss: 5.73282740246348
Episode: 160: Time: 9.131704568862915 Total Reward: 377.72727272726695 Avg_Loss: 5.715432045840416
Episode: 161: Time: 9.167474746704102 Total Reward: 475.44673539518135 Avg_Loss: 6.15544828697413
Episode: 162: Time: 9.068080425262451 Total Reward: 167.13592233010144 Avg_Loss: 5.459136962890625
Episode: 163: Time: 9.010035514831543 Total Reward: 420.2542372881285 Avg_Loss: 6.718961082586722
Episode: 164: Time: 8.829501867294312 Total Reward: 130.45454545454967 Avg_Loss: 5.950427332846057

Episode: 165: Time: 9.189848899841309 Total Reward: 452.29729729729115 Avg_Loss: 5.995124981182964
Episode: 166: Time: 9.37351393699646 Total Reward: 119.28571428571718 Avg_Loss: 6.048812803601017
Episode: 167: Time: 9.249087572097778 Total Reward: 430.17985611510204 Avg_Loss: 5.8580608207638525
Episode: 168: Time: 9.12891435623169 Total Reward: 376.6312056737532 Avg_Loss: 6.36778466641402
Episode: 169: Time: 9.02166199684143 Total Reward: 423.7969924811945 Avg_Loss: 6.318931608640847
Episode: 170: Time: 8.912148237228394 Total Reward: 144.726027397262 Avg_Loss: 6.208930236451766
Episode: 171: Time: 9.1906578540802 Total Reward: 218.38028169014274 Avg_Loss: 6.2227847616211704
Episode: 172: Time: 9.24285626411438 Total Reward: 311.0150375939852 Avg_Loss: 6.180407596235516
Episode: 173: Time: 9.561874866485596 Total Reward: 344.25233644859713 Avg_Loss: 6.180716964877954
Episode: 174: Time: 9.134507179260254 Total Reward: 382.1929824561354 Avg_Loss: 6.754353652481272
Episode: 175: Time: 9.329571723937988 Total Reward: 275.491803278685 Avg_Loss: 6.554105173639891
Episode: 176: Time: 8.8794846534729 Total Reward: 327.53521126760796 Avg_Loss: 6.0867763647512225
Episode: 177: Time: 9.047541379928589 Total Reward: 483.39721254354697 Avg_Loss: 6.517616270970898
Episode: 178: Time: 9.112586736679077 Total Reward: 263.1560283687867 Avg_Loss: 6.816468802820735
Episode: 179: Time: 9.236074924468994 Total Reward: 5.671140939596884 Avg_Loss: 6.644019722938538
Episode: 180: Time: 9.227322101593018 Total Reward: 410.4945054945032 Avg_Loss: 6.681969551479115
Episode: 181: Time: 9.382993221282959 Total Reward: 119.52145214521877 Avg_Loss: 6.37745388616033
Episode: 182: Time: 9.139262914657593 Total Reward: 184.4612794612838 Avg_Loss: 6.22804204155417
Episode: 183: Time: 9.086684942245483 Total Reward: 385.96885813148685 Avg_Loss: 6.279455515516906
Episode: 184: Time: 9.327415227890015 Total Reward: 327.2222222222194 Avg_Loss: 6.790889425938871
Episode: 185: Time: 9.418649196624756 Total Reward: 355.16077170417753 Avg_Loss: 7.0678726334531765
Episode: 186: Time: 9.743006944656372 Total Reward: 122.51412429378951 Avg_Loss: 6.3968217593281205
Episode: 187: Time: 8.970724821090698 Total Reward: 438.86454183266375 Avg_Loss: 6.428489553828199
Episode: 188: Time: 9.458844423294067 Total Reward: 327.15568862275495 Avg_Loss: 6.630683366991892
Episode: 189: Time: 9.166199922561646 Total Reward: 419.56310679610885 Avg_Loss: 6.660175645050883
Episode: 190: Time: 9.04369044303894 Total Reward: 82.35849056604162 Avg_Loss: 6.475533809481549
Episode: 191: Time: 9.155906438827515 Total Reward: 216.59420289855439 Avg_Loss: 7.096500553002878
Episode: 192: Time: 9.153875827789307 Total Reward: 489.5070422535139 Avg_Loss: 6.447372699985985

```
Episode: 193: Time: 9.19782042503357 Total Reward: 190.71428571429067 Avg_Lo
ss: 6.795293039634448
Episode: 194: Time: 9.489245653152466 Total Reward: 290.3820598006638 Avg_Lo
ss: 7.24889570224185
Episode: 195: Time: 9.215915203094482 Total Reward: 399.7735191637586 Avg_Lo
ss: 6.9011933047230505
Episode: 196: Time: 9.207491636276245 Total Reward: 438.3333333333235 Avg_Lo
ss: 6.567090383096903
Episode: 197: Time: 9.46213412284851 Total Reward: 520.6156156156085 Avg_Los
s: 6.876639698733802
Episode: 198: Time: 9.258939027786255 Total Reward: 399.6996466431057 Avg_Lo
ss: 7.130074843639085
Episode: 199: Time: 9.312360763549805 Total Reward: 507.1897810218919 Avg_Lo
ss: 6.531013310456476
Validation Mean Reward: 577.6487311267821 Validation Std Reward: 140.6105401
3639088
Test Mean Reward: 574.9394309586244 Test Std Reward: 161.74126340008897
```

In [15]:
```python
traineSoftUpdateDQN = DQN.SoftUpdateDQN(EnvWrapper(env),
                    model.Nature_Paper_Conv,
                    tau = 0.05,                          # Change this
                    update_freq = 1,
                    lr = 0.00025,
                    gamma = 0.95,
                    buffer_size = 100000,
                    batch_size = 32,
                    loss_fn = "mse_loss",
                    use_wandb = True,
                    device = 'cuda',
                    seed = 42,
                    epsilon_scheduler = utils.exponential_decay(1, 1000,0.1),
                    save_path = utils.get_save_path("DoubleDQN_SoftUpdates_test"

traineSoftUpdateDQN.train(200, 50, 30, 50, 50)
```

```
saving to ./runs/DoubleDQN_SoftUpdates_test/run1
Finishing previous runs because reinit is set to 'default'.
```

## Run history:

| loss | ▁▃▂▁▁▃▄▆▇▇▇▇█ |
|---|---|
| mean_reward | ▄▆█ |
| mean_test_reward | – |
| std_reward | ▅▄▄ |
| std_test_reward | – |
| total_reward | ▁▁▁▂▁▂▃▄▅▄▆▆▆▅▄▅▄▅▅█ |

## Run summary:

| | |
|---|---|
| loss | 6.53101 |
| mean_reward | 577.64873 |
| mean_test_reward | 574.93943 |
| std_reward | 140.61054 |
| std_test_reward | 161.74126 |
| total_reward | 507.18978 |

View run **rare-music-10** at: https://wandb.ai/kbaseba-ucla/racing-car-dqn/runs/op4iy3re
View project at: https://wandb.ai/kbaseba-ucla/racing-car-dqn
Synced 5 W&B file(s), 0 media file(s), 0 artifact file(s) and 0 other file(s)
Find logs at: ./wandb/run-20250608_143427-op4iy3re/logs
Tracking run with wandb version 0.20.0
Run data is saved locally in /home/tilboon/Documents/239AS_2/Project_4/wandb/run-20250608_152510-c8s95aqq
Syncing run **fine-gorge-11** to Weights & Biases (docs)
View project at https://wandb.ai/kbaseba-ucla/racing-car-dqn
View run at https://wandb.ai/kbaseba-ucla/racing-car-dqn/runs/c8s95aqq

```
Episode: 0: Time: 6.55631422996521 Total Reward: -54.86622073578655 Avg_Los
s: 0.0
Episode: 1: Time: 7.581755876541138 Total Reward: -68.28244274809225 Avg_Los
s: 0.4865546637914695
Episode: 2: Time: 8.656254053115845 Total Reward: -55.65573770491892 Avg_Los
s: 0.5086549636379605
Episode: 3: Time: 8.724108457565308 Total Reward: -71.27118644067843 Avg_Los
s: 0.4809999328044032
Episode: 4: Time: 8.742109060287476 Total Reward: -72.1241830065363 Avg_Los
s: 0.43843170103984846
Episode: 5: Time: 8.42009162902832 Total Reward: -22.083333333334075 Avg_Los
s: 0.5805974589316409
Episode: 6: Time: 8.606217861175537 Total Reward: -13.644067796610983 Avg_Lo
ss: 0.5989418487620204
Episode: 7: Time: 8.704542636871338 Total Reward: -71.94524495677253 Avg_Los
s: 0.5599531452758473
Episode: 8: Time: 9.113034725189209 Total Reward: -66.8750000000006 Avg_Los
s: 0.493291992287175
Episode: 9: Time: 8.81141471862793 Total Reward: -8.621262458472435 Avg_Los
s: 0.6571037256855423
Episode: 10: Time: 8.22707724571228 Total Reward: -25.65693430657005 Avg_Los
s: 0.6525096923989409
Episode: 11: Time: 8.38829517364502 Total Reward: -25.693069306931417 Avg_Lo
ss: 0.6255317283402971
Episode: 12: Time: 8.871688842773438 Total Reward: -16.824104234528445 Avg_L
oss: 0.772825041551049
Episode: 13: Time: 8.55030083656311 Total Reward: -36.97952218430106 Avg_Los
s: 0.8928053650159796
Episode: 14: Time: 8.642497062683105 Total Reward: 103.52941176471026 Avg_Lo
ss: 0.9824710191548371
Episode: 15: Time: 8.895750999450684 Total Reward: 6.010101010101762 Avg_Los
s: 1.0852697646292317
Episode: 16: Time: 8.733076572418213 Total Reward: -20.80645161290385 Avg_Lo
ss: 1.0438092677157467
Episode: 17: Time: 8.475907564163208 Total Reward: 79.90494296578422 Avg_Los
s: 1.0586559718020825
Episode: 18: Time: 8.296856880187988 Total Reward: -29.210526315790187 Avg_L
oss: 1.2190330320296168
Episode: 19: Time: 8.771589040756226 Total Reward: 13.433734939759745 Avg_Lo
ss: 1.3291235137261261
Episode: 20: Time: 8.712218761444092 Total Reward: 137.08191126280315 Avg_Lo
ss: 1.4172903011326028
Episode: 21: Time: 8.55316948890686 Total Reward: 24.718309859156484 Avg_Los
s: 1.461368911531793
Episode: 22: Time: 8.505423784255981 Total Reward: 41.0544217687104 Avg_Los
s: 1.695549615604036
Episode: 23: Time: 8.857015371322632 Total Reward: 576.1409395973062 Avg_Los
s: 1.7074172242599375
Episode: 24: Time: 8.569616794586182 Total Reward: 59.882154882158886 Avg_Lo
ss: 2.302375654963886
Episode: 25: Time: 8.973933458328247 Total Reward: 14.929078014184945 Avg_Lo
ss: 2.1217133114818765
Episode: 26: Time: 8.579491138458252 Total Reward: 302.8873239436549 Avg_Los
s: 2.426853459046668
Episode: 27: Time: 8.743886232376099 Total Reward: -17.297297297297842 Avg_L
oss: 2.6968440588782814
```

Episode: 28: Time: 9.076586484909058 Total Reward: 410.26315789472335 Avg_Loss: 3.1910811737805855
Episode: 29: Time: 9.137084245681763 Total Reward: 540.514018691581 Avg_Loss: 3.1396390307350317
Episode: 30: Time: 8.925475120544434 Total Reward: 550.0381679389219 Avg_Loss: 3.927446303748283
Episode: 31: Time: 8.71179461479187 Total Reward: 379.8201438848848 Avg_Loss: 4.670656949031253
Episode: 32: Time: 8.862555980682373 Total Reward: 325.3389830508378 Avg_Loss: 4.554288895691142
Episode: 33: Time: 8.81320858001709 Total Reward: 601.5517241379213 Avg_Loss: 4.833331258607512
Episode: 34: Time: 9.507601261138916 Total Reward: 380.72815533979724 Avg_Loss: 4.29290444209796
Episode: 35: Time: 9.097410678863525 Total Reward: 300.77039274923635 Avg_Loss: 4.6109382094455365
Episode: 36: Time: 8.74570631980896 Total Reward: 41.94267515923875 Avg_Loss: 4.961462226485004
Episode: 37: Time: 8.309059619903564 Total Reward: 20.25423728813709 Avg_Loss: 4.859638847723729
Episode: 38: Time: 8.812207698822021 Total Reward: 527.1374045801467 Avg_Loss: 4.757881412486069
Episode: 39: Time: 9.319167137145996 Total Reward: 289.6153846153864 Avg_Loss: 5.481468550297392
Episode: 40: Time: 9.206023931503296 Total Reward: 175.1149425287366 Avg_Loss: 4.8679322825760405
Episode: 41: Time: 8.916181087493896 Total Reward: 392.8048780487742 Avg_Loss: 4.853203788024037
Episode: 42: Time: 9.14850926399231 Total Reward: 266.37071651090446 Avg_Loss: 4.893166213977237
Episode: 43: Time: 8.99984073638916 Total Reward: 636.6176470588127 Avg_Loss: 5.495840977720854
Episode: 44: Time: 8.740896701812744 Total Reward: 395.63670411985055 Avg_Loss: 5.9712739116003535
Episode: 45: Time: 8.9917631149292 Total Reward: 442.76435045316174 Avg_Loss: 6.005145690521272
Episode: 46: Time: 8.592645406723022 Total Reward: 298.7282229965132 Avg_Loss: 5.790172118599675
Episode: 47: Time: 8.44641661643982 Total Reward: 76.32867132867563 Avg_Loss: 6.541955533648739
Episode: 48: Time: 9.14127516746521 Total Reward: 304.2805755395703 Avg_Loss: 5.46043711950799
Episode: 49: Time: 8.963106155395508 Total Reward: 499.3060498220573 Avg_Loss: 5.89729894810364
Validation Mean Reward: 58.31206389510172 Validation Std Reward: 286.7354936594495
Episode: 50: Time: 9.658407211303711 Total Reward: 433.8461538461494 Avg_Loss: 6.053715921750589
Episode: 51: Time: 8.60307765007019 Total Reward: 314.9616858237438 Avg_Loss: 6.300067284527947
Episode: 52: Time: 9.194609880447388 Total Reward: 451.0317460317408 Avg_Loss: 5.95908453684895
Episode: 53: Time: 9.252808809280396 Total Reward: 467.9139072847596 Avg_Loss: 5.79165279815177
Episode: 54: Time: 9.05179214477539 Total Reward: 202.29729729730002 Avg_Loss: 6.425098375612948

Episode: 55: Time: 8.673473119735718 Total Reward: 105.00000000000452 Avg_Loss: 6.589431604918311
Episode: 56: Time: 8.764201879501343 Total Reward: 316.55234657039824 Avg_Loss: 6.908313648039553
Episode: 57: Time: 8.801118850708008 Total Reward: 341.17021276595756 Avg_Loss: 6.4400429520286435
Episode: 58: Time: 9.116507530212402 Total Reward: 313.4084084084079 Avg_Loss: 5.991703991629496
Episode: 59: Time: 8.80799126625061 Total Reward: 63.73015873016092 Avg_Loss: 6.325787195137569
Episode: 60: Time: 9.07243299484253 Total Reward: 316.3475177304961 Avg_Loss: 5.935520343920764
Episode: 61: Time: 8.851253986358643 Total Reward: 269.62093862815897 Avg_Loss: 6.414194993612145
Episode: 62: Time: 8.957344055175781 Total Reward: 344.9999999999977 Avg_Loss: 6.391266602428019
Episode: 63: Time: 8.931047439575195 Total Reward: 239.43708609271107 Avg_Loss: 6.1813709891142965
Episode: 64: Time: 8.74915099143982 Total Reward: 273.6274509803913 Avg_Loss: 5.9635495102706075
Episode: 65: Time: 8.793562650680542 Total Reward: 249.8275862068998 Avg_Loss: 6.390672708759789
Episode: 66: Time: 8.815327644348145 Total Reward: 304.99999999999693 Avg_Loss: 6.091458806470663
Episode: 67: Time: 8.58182430267334 Total Reward: 70.56291390728924 Avg_Loss: 6.00324061588079
Episode: 68: Time: 9.027546882629395 Total Reward: 426.8978102189732 Avg_Loss: 6.32195696259747
Episode: 69: Time: 9.03364896774292 Total Reward: 342.2623574144475 Avg_Loss: 5.976115789734015
Episode: 70: Time: 9.46207046508789 Total Reward: 155.00000000000387 Avg_Loss: 6.172614700653973
Episode: 71: Time: 9.06264328956604 Total Reward: 443.9610389610336 Avg_Loss: 5.4264433839741875
Episode: 72: Time: 8.89584231376648 Total Reward: 245.35087719298434 Avg_Loss: 5.861206529521141
Episode: 73: Time: 8.893415927886963 Total Reward: 255.99337748344706 Avg_Loss: 5.880333795266993
Episode: 74: Time: 9.067109107971191 Total Reward: 383.4172661870447 Avg_Loss: 5.518294702057077
Episode: 75: Time: 9.276307106018066 Total Reward: 346.1764705882313 Avg_Loss: 6.075960108212063
Episode: 76: Time: 9.055240869522095 Total Reward: 387.31511254019176 Avg_Loss: 5.383485968874282
Episode: 77: Time: 8.838793992996216 Total Reward: 252.51773049645885 Avg_Loss: 5.840982933505242
Episode: 78: Time: 8.845920085906982 Total Reward: 288.606557377053 Avg_Loss: 5.550864078918425
Episode: 79: Time: 8.684959650039673 Total Reward: 469.20233463034197 Avg_Loss: 5.976971710429472
Episode: 80: Time: 8.906686305999756 Total Reward: 482.1812080536823 Avg_Loss: 6.225578040635886
Episode: 81: Time: 8.982645988464355 Total Reward: 455.335570469791 Avg_Loss: 5.969168678051283
Episode: 82: Time: 9.05826449394226 Total Reward: 301.2264150943397 Avg_Loss: 6.014311863594696

Episode: 83: Time: 9.054595470428467 Total Reward: 476.92982456139373 Avg_Loss: 5.649929322114511
Episode: 84: Time: 8.913748979568481 Total Reward: 560.4054054053931 Avg_Loss: 6.14131827965504
Episode: 85: Time: 8.974913358688354 Total Reward: 468.1768953068487 Avg_Loss: 5.958060878665507
Episode: 86: Time: 8.837276935577393 Total Reward: 194.38906752411998 Avg_Loss: 5.73548565291557
Episode: 87: Time: 8.935795783996582 Total Reward: 277.34042553191773 Avg_Loss: 5.6888635288767455
Episode: 88: Time: 9.145404815673828 Total Reward: 298.65079365078464 Avg_Loss: 5.915154963982205
Episode: 89: Time: 3.037879705429077 Total Reward: 11.194533762058825 Avg_Loss: 5.631167059852963
Episode: 90: Time: 8.942649841308594 Total Reward: 418.88888888888516 Avg_Loss: 5.824968677108028
Episode: 91: Time: 8.945473670959473 Total Reward: 439.96503496503146 Avg_Loss: 5.774096612168961
Episode: 92: Time: 8.977162837982178 Total Reward: 387.9931972789103 Avg_Loss: 5.530826104789221
Episode: 93: Time: 8.797797918319702 Total Reward: 496.6030534351044 Avg_Loss: 6.007252356084455
Episode: 94: Time: 8.790629863739014 Total Reward: 439.0909090909032 Avg_Loss: 6.177214349017424
Episode: 95: Time: 9.273578882217407 Total Reward: 359.8286604361312 Avg_Loss: 5.9552068855582165
Episode: 96: Time: 9.403635501861572 Total Reward: 398.54838709676767 Avg_Loss: 5.848199717637871
Episode: 97: Time: 9.27015209197998 Total Reward: 358.674121405748 Avg_Loss: 7.359165480156906
Episode: 98: Time: 8.919915676116943 Total Reward: 357.2968197879827 Avg_Loss: 6.189526237359567
Episode: 99: Time: 9.031726121902466 Total Reward: 518.63636363636 Avg_Loss: 6.111856684965246
Validation Mean Reward: 359.17731124489706 Validation Std Reward: 80.71327194746027
Episode: 100: Time: 9.359397649765015 Total Reward: 168.77952755905966 Avg_Loss: 7.008666909041525
Episode: 101: Time: 9.502763748168945 Total Reward: 437.30769230768806 Avg_Loss: 6.392469161197919
Episode: 102: Time: 9.276285409927368 Total Reward: 303.75389408098636 Avg_Loss: 5.725183223976808
Episode: 103: Time: 9.051869869232178 Total Reward: 525.0716845878071 Avg_Loss: 5.876977665083749
Episode: 104: Time: 8.97771406173706 Total Reward: 525.9150326797306 Avg_Loss: 5.852052958071733
Episode: 105: Time: 8.826242685317993 Total Reward: 538.9622641509325 Avg_Loss: 5.8595993143169816
Episode: 106: Time: 8.954313278198242 Total Reward: 525.209059233439 Avg_Loss: 5.860063932523006
Episode: 107: Time: 9.129685163497925 Total Reward: 233.94736842105627 Avg_Loss: 6.080731180535645
Episode: 108: Time: 9.092817306518555 Total Reward: 794.3129770992251 Avg_Loss: 5.4701331192705815
Episode: 109: Time: 9.06210970878601 Total Reward: 311.59340659339284 Avg_Loss: 5.812028173138113

Episode: 110: Time: 8.97760534286499 Total Reward: 502.3597359735924 Avg_Loss: 5.393580956619327
Episode: 111: Time: 8.957183837890625 Total Reward: 479.25742574256685 Avg_Loss: 5.957861848238136
Episode: 112: Time: 9.271071910858154 Total Reward: 295.5325443786918 Avg_Loss: 6.192001383845546
Episode: 113: Time: 8.876284122467041 Total Reward: 566.9718309859048 Avg_Loss: 6.3718596466449124
Episode: 114: Time: 9.145821332931519 Total Reward: 624.1780821917682 Avg_Loss: 5.804842846734183
Episode: 115: Time: 9.122658967971802 Total Reward: 438.80782918149373 Avg_Loss: 6.335016512069382
Episode: 116: Time: 9.548054456710815 Total Reward: 424.2307692307583 Avg_Loss: 5.997030410446039
Episode: 117: Time: 9.375480890274048 Total Reward: 473.2539682539638 Avg_Loss: 5.956745285947783
Episode: 118: Time: 8.997241735458374 Total Reward: 95.00000000000395 Avg_Loss: 6.0423396675526595
Episode: 119: Time: 8.928192377090454 Total Reward: 368.576158940395 Avg_Loss: 6.381139435687987
Episode: 120: Time: 9.169574499130249 Total Reward: 562.7181208053605 Avg_Loss: 6.2024202266661055
Episode: 121: Time: 9.23650860786438 Total Reward: 569.2599277978225 Avg_Loss: 5.798326379110833
Episode: 122: Time: 9.257285833358765 Total Reward: 654.0909090908967 Avg_Loss: 6.12752515027503
Episode: 123: Time: 9.254431009292603 Total Reward: 334.60288808663387 Avg_Loss: 6.29556497505733
Episode: 124: Time: 9.289996862411499 Total Reward: 431.8138801261716 Avg_Loss: 6.252889081209648
Episode: 125: Time: 9.2678382396698 Total Reward: 467.49999999999545 Avg_Loss: 6.792087465775113
Episode: 126: Time: 8.944157600402832 Total Reward: 647.2680412371033 Avg_Loss: 6.228049789657112
Episode: 127: Time: 8.924472093582153 Total Reward: 470.8362989323758 Avg_Loss: 6.642333588680299
Episode: 128: Time: 8.995054960250854 Total Reward: 742.6383763837558 Avg_Loss: 6.108020710344074
Episode: 129: Time: 9.782647609710693 Total Reward: 297.67015706806217 Avg_Loss: 6.197192994486384
Episode: 130: Time: 9.555768728256226 Total Reward: 439.9544072948234 Avg_Loss: 6.340594404885749
Episode: 131: Time: 9.08438515663147 Total Reward: 397.90780141843845 Avg_Loss: 5.982351170868433
Episode: 132: Time: 9.027397394180298 Total Reward: 466.64383561643047 Avg_Loss: 5.744589814618856
Episode: 133: Time: 8.702022552490234 Total Reward: 492.54863813229167 Avg_Loss: 6.2613062007086615
Episode: 134: Time: 9.332598209381104 Total Reward: 342.888198757763 Avg_Loss: 6.794724473432333
Episode: 135: Time: 9.123998403549194 Total Reward: 380.52447552447114 Avg_Loss: 5.528870404267511
Episode: 136: Time: 9.27253532409668 Total Reward: 575.2508960573357 Avg_Loss: 5.924862504005432
Episode: 137: Time: 9.009866714477539 Total Reward: 666.3636363636247 Avg_Loss: 6.524320958041343435

Episode: 138: Time: 9.150161743164062 Total Reward: 418.15789473683725 Avg_Loss: 6.575525171616498
Episode: 139: Time: 8.928948402404785 Total Reward: 596.5254237288032 Avg_Loss: 6.027219917093005
Episode: 140: Time: 8.987720012664795 Total Reward: 642.762237762226 Avg_Loss: 6.3318118688439124
Episode: 141: Time: 9.00813913345337 Total Reward: 616.8055555555452 Avg_Loss: 6.603807534490313
Episode: 142: Time: 9.115390539169312 Total Reward: 579.9116607773775 Avg_Loss: 6.52598726098277
Episode: 143: Time: 9.207422494888306 Total Reward: 485.6451612903141 Avg_Loss: 6.654843094969998
Episode: 144: Time: 9.366041660308838 Total Reward: 163.06451612903646 Avg_Loss: 6.61655907470639
Episode: 145: Time: 3.6324942111968994 Total Reward: -8.788475836429754 Avg_Loss: 6.5973257312969285
Episode: 146: Time: 9.06598448753357 Total Reward: 691.2318840579638 Avg_Loss: 6.710681978394003
Episode: 147: Time: 9.002128601074219 Total Reward: 471.5529010238816 Avg_Loss: 6.325907439744773
Episode: 148: Time: 9.054104328155518 Total Reward: 663.0645161290242 Avg_Loss: 6.059993513992855
Episode: 149: Time: 9.109380006790161 Total Reward: 580.9581881532996 Avg_Loss: 6.3760623090407424
Validation Mean Reward: 711.2303030879721 Validation Std Reward: 80.55127160966934
Episode: 150: Time: 9.619236469268799 Total Reward: 547.8571428571347 Avg_Loss: 7.041560387411037
Episode: 151: Time: 9.219735383987427 Total Reward: 477.9537366547968 Avg_Loss: 6.785124844863635
Episode: 152: Time: 9.139271020889282 Total Reward: 529.5353159851177 Avg_Loss: 6.361135151205945
Episode: 153: Time: 9.236505508422852 Total Reward: 502.9381443298912 Avg_Loss: 6.251157969987693
Episode: 154: Time: 9.163758277893066 Total Reward: 604.2481203007388 Avg_Loss: 6.389032204611962
Episode: 155: Time: 9.723037958145142 Total Reward: 308.50877192981704 Avg_Loss: 8.795837664804539
Episode: 156: Time: 9.465022563934326 Total Reward: 570.5405405405338 Avg_Loss: 7.40439294766979
Episode: 157: Time: 9.205631017684937 Total Reward: 751.9387755101959 Avg_Loss: 7.215280253346227
Episode: 158: Time: 9.296576261520386 Total Reward: 529.6056782334269 Avg_Loss: 6.811880622591291
Episode: 159: Time: 9.044585704803467 Total Reward: 605.7299270072876 Avg_Loss: 7.655168439660754
Episode: 160: Time: 9.250665187835693 Total Reward: 598.8775510203991 Avg_Loss: 8.002801392258716
Episode: 161: Time: 9.125159978866577 Total Reward: 469.5756457564505 Avg_Loss: 7.047252157155206
Episode: 162: Time: 9.319249629974365 Total Reward: 438.80782918148964 Avg_Loss: 6.59282609745234
Episode: 163: Time: 9.383734703063965 Total Reward: 332.0833333333305 Avg_Loss: 6.674469880697106
Episode: 164: Time: 9.15494680404663 Total Reward: 440.5932203389743 Avg_Loss: 6.264924726566346

Episode: 165: Time: 9.238390445709229 Total Reward: 399.8096885813127 Avg_Loss: 6.876724563225978
Episode: 166: Time: 9.162024021148682 Total Reward: 682.4193548387013 Avg_Loss: 6.842188826128214
Episode: 167: Time: 9.239818096160889 Total Reward: 605.3367003366866 Avg_Loss: 6.901169469376572
Episode: 168: Time: 9.151572227478027 Total Reward: 606.438848920852 Avg_Loss: 6.5898542854966236
Episode: 169: Time: 9.183410882949829 Total Reward: 675.3180212014009 Avg_Loss: 6.455259120764852
Episode: 170: Time: 9.35300874710083 Total Reward: 431.49006622515856 Avg_Loss: 7.010238892891827
Episode: 171: Time: 9.117608547210693 Total Reward: 350.9930313588752 Avg_Loss: 7.185561111995152
Episode: 172: Time: 9.059525728225708 Total Reward: 542.3239436619638 Avg_Loss: 6.87105826870734
Episode: 173: Time: 9.28116250038147 Total Reward: 342.299035369772 Avg_Loss: 6.718605231838066
Episode: 174: Time: 9.198558807373047 Total Reward: 680.3623188405702 Avg_Loss: 7.989525622680407
Episode: 175: Time: 9.22857403755188 Total Reward: 551.3878326996114 Avg_Loss: 7.088277621429508
Episode: 176: Time: 9.231263875961304 Total Reward: 677.2419928825508 Avg_Loss: 7.23193033703235
Episode: 177: Time: 9.193994522094727 Total Reward: 642.5886524822591 Avg_Loss: 7.762847203166545
Episode: 178: Time: 9.241966724395752 Total Reward: 559.6052631578873 Avg_Loss: 7.360956490540705
Episode: 179: Time: 9.092979431152344 Total Reward: 613.9041095890284 Avg_Loss: 7.084643033372254
Episode: 180: Time: 9.30953860282898 Total Reward: 627.222222222213 Avg_Loss: 7.261575407340747
Episode: 181: Time: 9.40207815170288 Total Reward: 426.12676056337136 Avg_Loss: 7.1180779443067665
Episode: 182: Time: 9.3632173538208 Total Reward: 677.1088435374066 Avg_Loss: 7.171522392946131
Episode: 183: Time: 9.220801830291748 Total Reward: 634.4520547945087 Avg_Loss: 8.891976547842265
Episode: 184: Time: 9.10243535041809 Total Reward: 571.6666666666579 Avg_Loss: 7.501421173079675
Episode: 185: Time: 9.325447797775269 Total Reward: 228.03370786517002 Avg_Loss: 7.462831434081583
Episode: 186: Time: 9.430377006530762 Total Reward: 298.5860058309054 Avg_Loss: 7.543626017931129
Episode: 187: Time: 9.33642029762268 Total Reward: 249.72049689440084 Avg_Loss: 7.096131737492666
Episode: 188: Time: 9.254774808883667 Total Reward: 535.508474576262 Avg_Loss: 7.2828914508098315
Episode: 189: Time: 9.368557453155518 Total Reward: 575.1030927834935 Avg_Loss: 8.295567695834055
Episode: 190: Time: 9.326198101043701 Total Reward: 557.7777777777678 Avg_Loss: 6.974707424139776
Episode: 191: Time: 9.064075946807861 Total Reward: 602.0802919707938 Avg_Loss: 7.795918186171716
Episode: 192: Time: 8.915533781051636 Total Reward: 663.4905660377241 Avg_Loss: 7.021428292538939

Episode: 193: Time: 9.186847686767578 Total Reward: 507.1897810218916 Avg_Loss: 7.711164915261149
Episode: 194: Time: 9.376569509506226 Total Reward: 434.78056426331705 Avg_Loss: 7.624573596385347
Episode: 195: Time: 9.396681547164917 Total Reward: 553.2758620689541 Avg_Loss: 8.298684581988999
Episode: 196: Time: 9.380217552185059 Total Reward: 357.3076923076892 Avg_Loss: 7.318462701404796
Episode: 197: Time: 9.642503261566162 Total Reward: 345.9221902017235 Avg_Loss: 6.913225777008954
Episode: 198: Time: 8.861536264419556 Total Reward: 646.3127413127265 Avg_Loss: 7.168872042864311
Episode: 199: Time: 8.84920334815979 Total Reward: 674.2307692307588 Avg_Loss: 7.7386015302994675
Validation Mean Reward: 580.7310101725287 Validation Std Reward: 158.73226598640662
Test Mean Reward: 704.801135613288 Test Std Reward: 107.43199837224009

```python
import cv2
import numpy as np
import gymnasium as gym
import matplotlib.pyplot as plt
from utils import preprocess #this is a helper function that may be useful to grayscale and
crop the image


class EnvWrapper(gym.Wrapper):
    def __init__(
        self,
        env:gym.Env,
        skip_frames:int=4,
        stack_frames:int=4,
        initial_no_op:int=50,
        do_nothing_action:int=0,
        **kwargs
    ):
        """
        Gym Wrapper for CarRacing-v3 that adds frame-skipping, frame-stacking,
        and an initial no-op period to facilitate training.

        Args:
            env (gym.Env): the original environment
            skip_frames (int, optional): the number of frames to skip, in other words we will
repeat the same action for `skip_frames` steps.
            stack_frames (int, optional): the number of frames to stack as a state, we stack
            `stack_frames` frames to form the state and allow agent understand the motion of
the car. Defaults to 4.
            initial_no_op (int, optional): the initial number of no-op steps to do nothing at
the beginning of the episode. Defaults to 50.
            do_nothing_action (int, optional): the action index for doing nothing. Defaults to
0, which should be correct unless you have modified the
            discretization of the action space.
        """
        super().__init__(env, **kwargs)
        self.initial_no_op = initial_no_op
        self.skip_frames = skip_frames
        self.stack_frames = stack_frames
        self.observation_space = gym.spaces.Box(
            low=0,
            high=1,
            shape=(stack_frames, 84, 84),
            dtype=np.float32
        )
        self.do_nothing_action = do_nothing_action



    def reset(self, **kwargs):
        """
        Reset the environment and perform a sequence of no-op actions before
        returning the initial stacked state.

        Returns:
            stacked_state (np.ndarray): Array shape (stack_frames,84,84).
            info (dict): Env-provided info dict.
        """
        # ========== YOUR CODE HERE ==========
        # TODO:
        # 1. call the enviroment reset
        # 2. do nothing for the next self.initial_no_op` steps
        # 3. crop and resize the final frame
        # 4. stack the frames to form the initial state
        # ===================================

        # step 1
```

```python
        obs, info = self.env.reset(**kwargs)

        # step 2
        for _ in range(self.initial_no_op):
            obs, _, terminated, truncated, _ = self.env.step(self.do_nothing_action)
            if terminated or truncated:
                obs, info = self.env.reset(**kwargs)

        # step 3
        processed_frame = preprocess(obs)  # Assume this returns (84, 84) grayscale float32
np.array

        # step 4
        frames = []
        for _ in range(self.stack_frames):
            frames.append(processed_frame)

        self.stacked_state = np.stack(frames, axis=0)

        # ========== YOUR CODE ENDS ==========

        return self.stacked_state, info

    def step(self, action):
        """
        Apply the given action with frame-skipping, accumulate rewards,
        and update the frame stack.

        Args:
            action (int): Discrete action index to execute.

        Returns:
            stacked_state (np.ndarray): Updated state with recent `stack_frames` frames.
            reward (float): Sum of rewards over skipped frames.
            terminated (bool): True if env episode ended.
            truncated (bool): True if env truncated.
            info (dict): Env-provided info dict.
        """
        # ========== YOUR CODE HERE ==========
        # TODO:
        # 1. take step(action) on underlying env for `self.skip_frames` steps.
        # 2. sum the immediate rewards
        # 3. preprocess the final observed frame.
        # 4. append new frame to `self.stacked_state` and remove oldest.
        # ====================================

        total_reward = 0.0
        terminated = False
        truncated = False
        info = {}

        # step 1 and step 2
        for _ in range(self.skip_frames):
            obs, reward, terminated, truncated, info = self.env.step(action)
            total_reward += reward
            if terminated or truncated:
                break

        # step 3
        processed_frame = preprocess(obs)

        # step 4
        self.stacked_state = np.concatenate(
            [self.stacked_state[1:], np.expand_dims(processed_frame, axis=0)],
            axis=0
        )
```

```python
        # ========== YOUR CODE ENDS ==========
        return self.stacked_state, total_reward, terminated, truncated, info
```

```python
import torch as torch
import torch.nn as nn


import torch
import torch.nn as nn
import numpy as np


class MLP(nn.Module):
    def __init__(self, input_size:int, action_size:int,
hidden_size:int=256,non_linear:nn.Module=nn.ReLU):
        """
        input: tuple[int]
            The input size of the image, of shape (channels, height, width)
        action_size: int
            The number of possible actions
        hidden_size: int
            The number of neurons in the hidden layer

        This is a seperate class because it may be useful for the bonus questions
        """
        super(MLP, self).__init__()
        # ========== YOUR CODE HERE ==========
        # TODO:
        # self.linear1 =
        # self.output =
        # self.non_linear =
        # ===================================

        self.linear1 = nn.Linear(input_size, hidden_size)
        self.output = nn.Linear(hidden_size, action_size)
        self.non_linear = non_linear()

        # ========== YOUR CODE ENDS ==========

    def forward(self, x:torch.Tensor)->torch.Tensor:
        # ========== YOUR CODE HERE ==========

        x = self.non_linear(self.linear1(x))
        x = self.output(x)

        # ========== YOUR CODE ENDS ==========
        return x

class Nature_Paper_Conv(nn.Module):
    """
    A class that defines a neural network with the following architecture:
    - 1 convolutional layer with 32 8x8 kernels with a stride of 4x4 w/ ReLU activation
    - 1 convolutional layer with 64 4x4 kernels with a stride of 2x2 w/ ReLU activation
    - 1 convolutional layer with 64 3x3 kernels with a stride of 1x1 w/ ReLU activation
    - 1 fully connected layer with 512 neurons and ReLU activation.
    Based on 2015 paper 'Human-level control through deep reinforcement learning' by Mnih et al
    """
    def __init__(self, input_size:tuple[int], action_size:int,**kwargs):
        """
        input: tuple[int]
            The input size of the image, of shape (channels, height, width)
        action_size: int
            The number of possible actions
        **kwargs: dict
            additional kwargs to pass for stuff like dropout, etc if you would want to
implement it
        """
        super(Nature_Paper_Conv, self).__init__()
        # ========== YOUR CODE HERE ==========
```

```python
        c, h, w = input_size

        self.CNN = nn.Sequential(
            nn.Conv2d(c, 32, kernel_size=8, stride=4),
            nn.ReLU(),
            nn.Conv2d(32, 64, kernel_size=4, stride=2),
            nn.ReLU(),
            nn.Conv2d(64, 64, kernel_size=3, stride=1),
            nn.ReLU()
        )

        # Compute output size after conv layers
        def conv2d_out(size, kernel, stride):
            return (size - kernel) // stride + 1

        convw = conv2d_out(conv2d_out(conv2d_out(w, 8, 4), 4, 2), 3, 1)
        convh = conv2d_out(conv2d_out(conv2d_out(h, 8, 4), 4, 2), 3, 1)
        linear_input_size = convw * convh * 64

        # Must match weight file: 512 hidden units
        self.MLP = MLP(input_size=linear_input_size, action_size=action_size, hidden_size=512)


        # ========== YOUR CODE ENDS ==========

    def forward(self, x:torch.Tensor)->torch.Tensor:
        # ========== YOUR CODE HERE ==========

        x = self.CNN(x)
        x = x.view(x.size(0), -1)
        x = self.MLP(x)

        # ========== YOUR CODE ENDS ==========
        return x
```

```python
import random
import torch
import numpy as np

class ReplayBufferDQN:
    def __init__(self, buffer_size:int, seed:int=42):
        self.buffer_size = buffer_size
        self.seed = seed
        self.buffer = []
        random.seed(self.seed)

    def add(self, state:np.ndarray, action:int, reward:float, next_state:np.ndarray
            , done:bool):
        """
        Add a new experience to the buffer

        Args:
            state (np.ndarray): the current state of shape [n_c,h,w]
            action (int): the action taken
            reward (float): the reward received
            next_state (np.ndarray): the next state of shape [n_c,h,w]
            done (bool): whether the episode is done
        """
        self.buffer.append((state, action, reward, next_state, done))
        if len(self.buffer) > self.buffer_size:
            self.buffer.pop(0)


    def sample(self, batch_size:int, device='cpu'):
        """
        Randomly sample a batch of experiences from the replay buffer.

        Args:
            batch_size (int): the number of samples to take

        Returns:
            states (torch.Tensor): Tensor of shape (batch_size, n_channels, height, width),
dtype torch.float32.
            actions (torch.Tensor): Tensor of shape (batch_size,), dtype torch.int64
(converted via `.long()`).
            rewards (torch.Tensor): Tensor of shape (batch_size,), dtype torch.float32.
            next_states (torch.Tensor): Tensor of shape (batch_size, n_channels, height,
width), dtype torch.float32.
            dones (torch.Tensor): Tensor of shape (batch_size,), dtype torch.bool.

        Notes:
            1. Use `random.sample` for uniform sampling without replacement.
            2. Convert NumPy arrays to torch tensors with the correct dtype before moving to
`device`.
            3. Use `torch.stack` to combine individual tensors into a batch dimension.
            4. Keep the output shapes and dtypes consistent.
        """

        # ========= YOUR CODE HERE ==========
        # TODO:
        # 1. sample random indices
        # 2. collect experiences using the sampled indices
        # 3. stack and move batches to the specified device, making sure to convert to the
correct dtype
        # ===================================

        # step 1
        batch = random.sample(self.buffer, batch_size)

        # step 2
        states, actions, rewards, next_states, dones = zip(*batch)
```

```python
        # step 3
        states = torch.stack([torch.tensor(s, dtype=torch.float32) for s in
states]).to(device)
        actions = torch.tensor(actions, dtype=torch.int64).to(device)
        rewards = torch.tensor(rewards, dtype=torch.float32).to(device)
        next_states = torch.stack([torch.tensor(ns, dtype=torch.float32) for ns in
next_states]).to(device)
        dones = torch.tensor(dones, dtype=torch.bool).to(device)

        # ========== YOUR CODE ENDS ==========

        return states, actions, rewards, next_states, dones


    def __len__(self):
        return len(self.buffer)
```

```python
import torch
import torch.optim as optim
import torch.nn.functional as F
import torch.nn
import gymnasium as gym
from replay_buffer import ReplayBufferDQN
import wandb
import random
import numpy as np
import os
import time
from utils import exponential_decay
import typing

# TODO: change the logging here if you don't like wandb

class DQN:
    def __init__(self, env:typing.Union[gym.Env,gym.Wrapper],
                #model params
                model:torch.nn.Module,
                model_kwargs:dict = {},
                #overall hyperparams
                lr:float = 0.001, gamma:float = 0.99,
                buffer_size:int = 10000, batch_size:int = 32,
                loss_fn:str = 'mse_loss',
                use_wandb:bool = False,
                device:str = 'cpu',
                seed:int = 42,
                epsilon_scheduler = exponential_decay(1,700,0.1),
                save_path:str = None):
        """Initializes the DQN algorithm

        Args:
            env (gym.Env|gym.Wrapper): the environment to train on
            model (torch.nn.Module): the model to train
            model_kwargs (dict, optional): the keyword arguments to pass to the model. Defaults
to {}.
            lr (float, optional): the learning rate to use in the optimizer. Defaults to 0.001.
            gamma (float, optional): discount factor. Defaults to 0.99.
            buffer_size (int, optional): the size of the replay buffer. Defaults to 10000.
            batch_size (int, optional): the batch size. Defaults to 32.
            loss_fn (str, optional): the name of the loss function to use. Defualts to
'mse_loss'.
            use_wandb (bool, optional): _description_. Defaults to False.
            device (str, optional): _description_. Defaults to 'cpu'.
            seed (int, optional): the seed to use for reproducibility. Defaults to 42.
            epsilon_scheduler ([type], optional): the epsilon scheduler to use, must have a
__call__ method that returns a float between 0 and 1
            save_path (str, optional): _description_. Defaults to None.

        Raises:
            ValueError: _description_
        """

        self.env = env
        self._set_seed(seed)

        self.observation_space = self.env.observation_space.shape
        self.model = model(
            self.observation_space,
            self.env.action_space.n, **model_kwargs
            ).to(device)
        self.model.train()
        self.optimizer = optim.Adam(self.model.parameters(), lr = lr)
        self.gamma = gamma

        self.replay_buffer = ReplayBufferDQN(buffer_size)
```

```python
        self.batch_size = batch_size
        self.i_update = 0
        self.device = device
        self.epsilon_decay = epsilon_scheduler
        self.save_path = save_path if save_path is not None else "./"

        #set the loss function
        if loss_fn == 'smooth_l1_loss':
            self.loss_fn = F.smooth_l1_loss
        elif loss_fn == 'mse_loss':
            self.loss_fn = F.mse_loss
        else:
            raise ValueError('loss_fn must be either smooth_l1_loss or mse_loss')

        self.wandb = use_wandb
        if self.wandb:
            wandb.init(project = 'racing-car-dqn')
            #log the hyperparameters
            wandb.config.update({
                'lr': lr,
                'gamma': gamma,
                'buffer_size': buffer_size,
                'batch_size': batch_size,
                'loss_fn': loss_fn,
                'device': device,
                'seed': seed,
                'save_path': save_path
            })

    def train(self, n_episodes:int = 1000,validate_every:int = 100, n_validation_episodes:int
= 10, n_test_episodes:int = 10,save_every:int = 100):
        os.makedirs(self.save_path, exist_ok = True)
        best_val_reward = -np.inf

        for episode in range(n_episodes):
            state,_ = self.env.reset()
            done = False
            truncated = False
            total_reward = 0
            i = 0
            loss = 0
            start_time = time.time()
            epsilon = self.epsilon_decay()
            while (not done) and (not truncated):
                action = self._sample_action(state, epsilon)
                next_state, reward, done, truncated, _ = self.env.step(action)
                self.replay_buffer.add(state, action, reward, next_state, done)
                total_reward += reward
                state = next_state

                not_warm_starting,l = self._optimize_model()
                if not_warm_starting:
                    loss += l
                    epsilon = self.epsilon_decay()
                    i += 1
            if i == 0:
                avg_loss = loss / (i+1)
            else:
                avg_loss = loss/i
            if self.wandb:
                wandb.log({'total_reward': total_reward, 'loss': avg_loss})
            print(f"Episode: {episode}: Time: {time.time() - start_time} Total Reward:
{total_reward} Avg_Loss: {avg_loss}")
            if episode % validate_every == validate_every - 1:
                mean_reward, std_reward = self.validate(n_validation_episodes)
                if self.wandb:
                    wandb.log({'mean_reward': mean_reward, 'std_reward': std_reward})
```

```python
            print("Validation Mean Reward: {} Validation Std Reward:
{}".format(mean_reward, std_reward))
                if mean_reward > best_val_reward:
                    best_val_reward = mean_reward
                    self._save('best')

            if episode % save_every == save_every - 1:
                self._save(str(episode))

        self._save('final')
        self.load_model('best')
        mean_reward, std_reward = self.validate(n_test_episodes)
        if self.wandb:
            wandb.log({'mean_test_reward': mean_reward, 'std_test_reward': std_reward})
        print("Test Mean Reward: {} Test Std Reward: {}".format(mean_reward, std_reward))

    def _optimize_model(self):
        """
        Performs one optimization step on the DQN.

        Returns:
            bool: whether we have enough samples to optimize the model, which we define as
having at least 10*batch_size samples
            float: the loss, if we do not have enough samples, we return 0
        """
        # ========== YOUR CODE HERE ==========
        # TODO: some hints to get you started:
        # 1. check if the replay buffer has enough samples
        # 2. sample a minibatch
        # 3. No-op
        # 4. compute current Q: q_values = ...
        # 5. compute target Q
        # 6. compute loss between current Q and target Q
        # 7. backprop
        # ===================================

        # step 1
        if len(self.replay_buffer) < (10 * self.batch_size):
            return False, 0.0

        # step 2
        states, actions, rewards, next_states, dones =
self.replay_buffer.sample(self.batch_size, device=self.device)

        # step 3
        # No-op

        # step 4
        # Select Q-values for the taken actions
        q_values = self.model(states)  # shape: (batch_size, num_actions)

        # step 5: target_q
        with torch.no_grad():
            next_q_values = self.model(next_states)
            max_next_q_values = next_q_values.max(dim=1)[0]
            if dones.all():
                targets = rewards
            else:
                targets = rewards + self.gamma * max_next_q_values

        # step 6
        q_values_given_action = q_values.gather(1, actions.unsqueeze(1)).squeeze(1)  # shape:
(batch_size,)
        loss = self.loss_fn(q_values_given_action, targets)

        # step 7
        self.optimizer.zero_grad()
```

```python
        loss.backward()
        self.optimizer.step()

        return True, loss.item()

        # ========== YOUR CODE ENDS ==========

    def _sample_action(self, state:np.ndarray
                        , epsilon:float = 0.1)->int:
        """
        Samples an action from the model

        Args:
            state (np.ndarray): the state, of shape [n_c,h,w]
            epsilon (float, optional): the epsilon for epsilon greedy. Defaults to 0.1.

        Returns:
            int: the index of the action to take
        """
        # ========== YOUR CODE HERE ==========
        # TODO:
        # Epsilon-greedy action selection:
        #  - if probability epsilon: random action
        #  - else: greedy action
        # ====================================

        if random.random() < epsilon:
            index = self.env.action_space.sample()
        else:
            state_tensor = torch.tensor(state, dtype=torch.float32,
device=self.device).unsqueeze(0)
            with torch.no_grad():
                q_values = self.model(state_tensor)
                index = q_values.argmax(dim=1).item()

        # ========== YOUR CODE ENDS ==========
        return index

    def _set_seed(self, seed:int):
        random.seed(seed)
        np.random.seed(seed)
        self.seed = seed
        torch.manual_seed(seed)
        torch.cuda.manual_seed(seed)
        torch.backends.cudnn.deterministic = True
        gym.utils.seeding.np_random(seed)

    def _validate_once(self):
        state,_ = self.env.reset()
        done = False
        truncated = False
        total_reward = 0
        i = 0
        # epsilon = self.epsilon_decay()
        while (not done) and (not truncated):
            action = self._sample_action(state, 0)
            # out = self.env.step(action)
            next_state, reward, done, truncated, _ = self.env.step(action)
            # next_state = np.array(state_buffer[-self.n_frames:])
            total_reward += reward
            state = next_state
        return total_reward


    def validate(self, n_episodes:int = 10):
        # self.model.eval()
        rewards_per_episode = []
```

```python
        for _ in range(n_episodes):
            rewards_per_episode.append(self._validate_once())
        # self.model.train()
        return np.mean(rewards_per_episode), np.std(rewards_per_episode)

    def load_model(self, suffix:str = ''):
        self.model.load_state_dict(torch.load(os.path.join(self.save_path,
f'model_{suffix}.pt')))

    def _save(self,suffix:str = ''):
        torch.save(self.model.state_dict(), os.path.join(self.save_path,
f'model_{suffix}.pt'))

    def play_episode(self,epsilon:float  = 0, return_frames:bool = True,seed:int = None):
        """Plays an episode of the environment

        Args:
            epsilon (float, optional): the epsilon for epsilon greedy. Defaults to 0.
            return_frames (bool, optional): whether we should return frames. Defaults to True.
            seed (int, optional): the seed for the enviroment. Defaults to None.

        Returns:
            if return frames is True, returns the total reward and the frames
            if return frames is False, returns the total reward
        """
        if seed is not None:
            state,_ = self.env.reset(seed = seed)
        else:
            state,_ = self.env.reset()

        done = False
        total_reward = 0
        if return_frames:
            frames = []

        with torch.no_grad():
            while not done:
                action = self._sample_action(state, epsilon)
                next_state, reward, terminated, truncated, _ = self.env.step(action)
                total_reward += reward
                done = terminated or truncated
                if return_frames:
                    frames.append(self.env.render())
                state = next_state

        if return_frames:
            return total_reward, frames

        return total_reward


class HardUpdateDQN(DQN):

    def __init__(self,env,model,model_kwargs:dict = {},
                 update_freq:int = 5,*args,**kwargs):
        super().__init__(env,model,model_kwargs, *args,**kwargs)
        # ========= YOUR CODE HERE =========
        # TODO:
        # fill in the initialization and synchronization of the target model weights
        # ==================================

        # Initialize target network with same architecture
        self.target_model = model(
            self.observation_space,
            self.env.action_space.n,
            **model_kwargs
```

```python
        ).to(self.device)

        # Copy initial weights from model to target_model
        self.target_model.load_state_dict(self.model.state_dict())

        # Set target network to eval mode (not training)
        self.target_model.eval()

        # Store update frequency for hard target updates
        self.update_freq = update_freq

        # ========== YOUR CODE ENDS ==========

    def _optimize_model(self):
        """Optimizes the model

        Returns:
            bool: whether we have enough samples to optimize the model, which we define as
having at least 10*batch_size samples
            float: the loss, if we do not have enough samples, we return 0
        """
        # ========== YOUR CODE HERE ==========
        # TODO:
        # hint: you can copy over most of the code from the parent class
        # and only change one line
        # ====================================

        if len(self.replay_buffer) < (10 * self.batch_size):
            return False, 0.0

        # Sample batch
        states, actions, rewards, next_states, dones =
self.replay_buffer.sample(self.batch_size, device=self.device)

        # Compute Q(s, a) from current model
        q_values = self.model(states)
        q_values_given_action = q_values.gather(1, actions.unsqueeze(1)).squeeze(1)

        # Compute target Q using target network
        with torch.no_grad():
            next_q_values = self.target_model(next_states)  # changed from self.model
            max_next_q_values = next_q_values.max(dim=1)[0]
            targets = rewards + self.gamma * max_next_q_values * (~dones)

        # Compute loss and update
        loss = self.loss_fn(q_values_given_action, targets)
        self.optimizer.zero_grad()
        loss.backward()
        self.optimizer.step()

        # Update target model if needed
        self._update_model()

        return True, loss.item()

        # ========== YOUR CODE ENDS ==========

    def _update_model(self):
        self.i_update += 1
        if self.i_update % self.update_freq == 0:
            self.target_model.load_state_dict(self.model.state_dict())

    def _save(self,suffix:str = ''):
        torch.save(self.model.state_dict(), os.path.join(self.save_path,
f'model_{suffix}.pt'))
        torch.save(self.target_model.state_dict(), os.path.join(self.save_path,
f'target_model_{suffix}.pt'))
```

```python
    def load_model(self, suffix:str = ''):
        self.model.load_state_dict(torch.load(os.path.join(self.save_path,
f'model_{suffix}.pt')))
        self.target_model.load_state_dict(torch.load(os.path.join(self.save_path,
f'target_model_{suffix}.pt')))




class SoftUpdateDQN(HardUpdateDQN):
    def __init__(self,env,model,model_kwargs:dict = {},
                 tau:float = 0.01,*args,**kwargs):
        super().__init__(env,model,model_kwargs,*args,**kwargs)
        self.tau = tau

    def _update_model(self):
        """
        Soft updates the target model
        """
        # ========== YOUR CODE HERE ==========
        # TODO
        # ====================================

        for target_param, model_param in zip(self.target_model.parameters(),
self.model.parameters()):
            target_param.data.copy_(self.tau * model_param.data + (1.0 - self.tau) *
target_param.data)

        # ========== YOUR CODE ENDS ==========
```

# Reinforcement Learning Bonus: DDPG

- As before, please do not modify the folder architecture and do not rename some of the files.

- You will need to fill in the model.py and DDPG.py to solve the DoublePendulum environment.

- Because this is a bonus, there will be no test cases.

- This entire part will be worth 5 points of extra credit for project 4, and will be due on the same day as project 4, so June 6th.

To avoid pain with installation and model training, we strongly recommend you to use Colab for this project. DO NOT use Windows for this project.

## Set up

```
In [1]:  # mount it if you use Colab
         # from google.colab import drive
         # drive.mount('/content/drive')
```

```
In [2]:  # TODO: change the dir to your folder
         # %cd /content/drive/MyDrive/YOUR_FOLDER_NAME
```

```
In [3]:  %load_ext autoreload
         %autoreload 2
         %env MUJOCO_GL=egl
```

env: MUJOCO_GL=egl

```
In [4]:  !pip install numpy torch wandb swig gymnasium[mujoco] matplotlib termcolor
```

```
Requirement already satisfied: numpy in /home/anwesha/anaconda3/lib/python3.
11/site-packages (1.26.4)
Requirement already satisfied: torch in /home/anwesha/anaconda3/lib/python3.
11/site-packages (2.6.0+cu118)
Requirement already satisfied: wandb in /home/anwesha/anaconda3/lib/python3.
11/site-packages (0.19.11)
Requirement already satisfied: swig in /home/anwesha/anaconda3/lib/python3.1
1/site-packages (4.3.1)
Requirement already satisfied: matplotlib in /home/anwesha/anaconda3/lib/pyt
hon3.11/site-packages (3.8.0)
Requirement already satisfied: termcolor in /home/anwesha/anaconda3/lib/pyth
on3.11/site-packages (3.1.0)
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n3.11/site-packages (from torch) (3.13.1)
Requirement already satisfied: typing-extensions>=4.10.0 in /home/anwesha/an
aconda3/lib/python3.11/site-packages (from torch) (4.12.2)
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Requirement already satisfied: jinja2 in /home/anwesha/anaconda3/lib/python
3.11/site-packages (from torch) (3.1.3)
Requirement already satisfied: fsspec in /home/anwesha/anaconda3/lib/python
3.11/site-packages (from torch) (2023.10.0)
Requirement already satisfied: nvidia-cuda-nvrtc-cu11==11.8.89 in /home/anwe
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wesha/anaconda3/lib/python3.11/site-packages (from torch) (11.8.89)
Requirement already satisfied: nvidia-cuda-cupti-cu11==11.8.87 in /home/anwe
sha/anaconda3/lib/python3.11/site-packages (from torch) (11.8.87)
Requirement already satisfied: nvidia-cudnn-cu11==9.1.0.70 in /home/anwesha/
anaconda3/lib/python3.11/site-packages (from torch) (9.1.0.70)
Requirement already satisfied: nvidia-cublas-cu11==11.11.3.6 in /home/anwesh
a/anaconda3/lib/python3.11/site-packages (from torch) (11.11.3.6)
Requirement already satisfied: nvidia-cufft-cu11==10.9.0.58 in /home/anwesh
a/anaconda3/lib/python3.11/site-packages (from torch) (10.9.0.58)
Requirement already satisfied: nvidia-curand-cu11==10.3.0.86 in /home/anwesh
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Requirement already satisfied: nvidia-cusolver-cu11==11.4.1.48 in /home/anwe
sha/anaconda3/lib/python3.11/site-packages (from torch) (11.4.1.48)
Requirement already satisfied: nvidia-cusparse-cu11==11.7.5.86 in /home/anwe
sha/anaconda3/lib/python3.11/site-packages (from torch) (11.7.5.86)
Requirement already satisfied: nvidia-nccl-cu11==2.21.5 in /home/anwesha/ana
conda3/lib/python3.11/site-packages (from torch) (2.21.5)
Requirement already satisfied: nvidia-nvtx-cu11==11.8.86 in /home/anwesha/an
aconda3/lib/python3.11/site-packages (from torch) (11.8.86)
Requirement already satisfied: triton==3.2.0 in /home/anwesha/anaconda3/lib/
python3.11/site-packages (from torch) (3.2.0)
Requirement already satisfied: sympy==1.13.1 in /home/anwesha/anaconda3/lib/
python3.11/site-packages (from torch) (1.13.1)
Requirement already satisfied: mpmath<1.4,>=1.1.0 in /home/anwesha/anaconda
3/lib/python3.11/site-packages (from sympy==1.13.1->torch) (1.3.0)
Requirement already satisfied: click!=8.0.0,>=7.1 in /home/anwesha/anaconda
3/lib/python3.11/site-packages (from wandb) (8.1.7)
Requirement already satisfied: docker-pycreds>=0.4.0 in /home/anwesha/anacon
da3/lib/python3.11/site-packages (from wandb) (0.4.0)
```

```
Requirement already satisfied: gitpython!=3.1.29,>=1.0.0 in /home/anwesha/an
aconda3/lib/python3.11/site-packages (from wandb) (3.1.37)
Requirement already satisfied: platformdirs in /home/anwesha/anaconda3/lib/p
ython3.11/site-packages (from wandb) (3.10.0)
Requirement already satisfied: protobuf!=4.21.0,!=5.28.0,<7,>=3.19.0 in /hom
e/anwesha/anaconda3/lib/python3.11/site-packages (from wandb) (3.20.3)
Requirement already satisfied: psutil>=5.0.0 in /home/anwesha/anaconda3/lib/
python3.11/site-packages (from wandb) (5.9.0)
Requirement already satisfied: pydantic<3 in /home/anwesha/anaconda3/lib/pyt
hon3.11/site-packages (from wandb) (1.10.12)
Requirement already satisfied: pyyaml in /home/anwesha/anaconda3/lib/python
3.11/site-packages (from wandb) (6.0.1)
Requirement already satisfied: requests<3,>=2.0.0 in /home/anwesha/anaconda
3/lib/python3.11/site-packages (from wandb) (2.31.0)
Requirement already satisfied: sentry-sdk>=2.0.0 in /home/anwesha/anaconda3/
lib/python3.11/site-packages (from wandb) (2.28.0)
Requirement already satisfied: setproctitle in /home/anwesha/anaconda3/lib/p
ython3.11/site-packages (from wandb) (1.3.6)
Requirement already satisfied: setuptools in /home/anwesha/anaconda3/lib/pyt
hon3.11/site-packages (from wandb) (68.2.2)
Requirement already satisfied: cloudpickle>=1.2.0 in /home/anwesha/anaconda
3/lib/python3.11/site-packages (from gymnasium[mujoco]) (2.2.1)
Requirement already satisfied: farama-notifications>=0.0.1 in /home/anwesha/
anaconda3/lib/python3.11/site-packages (from gymnasium[mujoco]) (0.0.4)
Requirement already satisfied: mujoco>=2.1.5 in /home/anwesha/anaconda3/lib/
python3.11/site-packages (from gymnasium[mujoco]) (3.3.2)
Requirement already satisfied: imageio>=2.14.1 in /home/anwesha/anaconda3/li
b/python3.11/site-packages (from gymnasium[mujoco]) (2.33.1)
Requirement already satisfied: contourpy>=1.0.1 in /home/anwesha/anaconda3/l
ib/python3.11/site-packages (from matplotlib) (1.2.0)
Requirement already satisfied: cycler>=0.10 in /home/anwesha/anaconda3/lib/p
ython3.11/site-packages (from matplotlib) (0.11.0)
Requirement already satisfied: fonttools>=4.22.0 in /home/anwesha/anaconda3/
lib/python3.11/site-packages (from matplotlib) (4.25.0)
Requirement already satisfied: kiwisolver>=1.0.1 in /home/anwesha/anaconda3/
lib/python3.11/site-packages (from matplotlib) (1.4.4)
Requirement already satisfied: packaging>=20.0 in /home/anwesha/anaconda3/li
b/python3.11/site-packages (from matplotlib) (23.1)
Requirement already satisfied: pillow>=6.2.0 in /home/anwesha/anaconda3/lib/
python3.11/site-packages (from matplotlib) (10.2.0)
Requirement already satisfied: pyparsing>=2.3.1 in /home/anwesha/anaconda3/l
ib/python3.11/site-packages (from matplotlib) (3.0.9)
Requirement already satisfied: python-dateutil>=2.7 in /home/anwesha/anacond
a3/lib/python3.11/site-packages (from matplotlib) (2.8.2)
Requirement already satisfied: six>=1.4.0 in /home/anwesha/anaconda3/lib/pyt
hon3.11/site-packages (from docker-pycreds>=0.4.0->wandb) (1.16.0)
Requirement already satisfied: gitdb<5,>=4.0.1 in /home/anwesha/anaconda3/li
b/python3.11/site-packages (from gitpython!=3.1.29,>=1.0.0->wandb) (4.0.7)
Requirement already satisfied: absl-py in /home/anwesha/anaconda3/lib/python
3.11/site-packages (from mujoco>=2.1.5->gymnasium[mujoco]) (2.3.0)
Requirement already satisfied: etils[epath] in /home/anwesha/anaconda3/lib/p
ython3.11/site-packages (from mujoco>=2.1.5->gymnasium[mujoco]) (1.12.2)
Requirement already satisfied: glfw in /home/anwesha/anaconda3/lib/python3.1
1/site-packages (from mujoco>=2.1.5->gymnasium[mujoco]) (2.9.0)
Requirement already satisfied: pyopengl in /home/anwesha/anaconda3/lib/pytho
n3.11/site-packages (from mujoco>=2.1.5->gymnasium[mujoco]) (3.1.9)
```

```
Requirement already satisfied: charset-normalizer<4,>=2 in /home/anwesha/ana
conda3/lib/python3.11/site-packages (from requests<3,>=2.0.0->wandb) (2.0.4)
Requirement already satisfied: idna<4,>=2.5 in /home/anwesha/anaconda3/lib/p
ython3.11/site-packages (from requests<3,>=2.0.0->wandb) (3.4)
Requirement already satisfied: urllib3<3,>=1.21.1 in /home/anwesha/anaconda
3/lib/python3.11/site-packages (from requests<3,>=2.0.0->wandb) (2.0.7)
Requirement already satisfied: certifi>=2017.4.17 in /home/anwesha/anaconda
3/lib/python3.11/site-packages (from requests<3,>=2.0.0->wandb) (2024.2.2)
Requirement already satisfied: MarkupSafe>=2.0 in /home/anwesha/anaconda3/li
b/python3.11/site-packages (from jinja2->torch) (2.1.3)
Requirement already satisfied: smmap<5,>=3.0.1 in /home/anwesha/anaconda3/li
b/python3.11/site-packages (from gitdb<5,>=4.0.1->gitpython!=3.1.29,>=1.0.0-
>wandb) (4.0.0)
Requirement already satisfied: importlib_resources in /home/anwesha/anaconda
3/lib/python3.11/site-packages (from etils[epath]->mujoco>=2.1.5->gymnasium
[mujoco]) (6.5.2)
Requirement already satisfied: zipp in /home/anwesha/anaconda3/lib/python3.1
1/site-packages (from etils[epath]->mujoco>=2.1.5->gymnasium[mujoco]) (3.17.
0)
```

In [5]:
```python
from utils import *
```

# Introduction to the Enviroment

We will be training a DDPG agent to solve the DoublePendulum environment. The
DoublePendulum environment is a classic control problem where the goal is to
balance a double pendulum on a cart.

## Action Space

The agent can apply a force to the cart in the range of -1 to 1. This is a
continuous action space.

## Observation Space

The observation space is a 9 dimensional vector. The first 1 is the position of the
cart, the next 4 are the cosines and sins of different angles of the double
pendulum, and the next 3 are the velocities of the cart and the pendulum, and
the final 1 is the constrain forces on the cart. You can find more information
about these constraint forces here

## Reward

The reward can be decomposed into 3 parts. The first part is an alive bonus that
pays +10 for every time step the second pendulum is upright. There are 2
penalty terms, one for the tip of the second pendulum moving too much, and
another for the cart moving too fast.

You can find more information about the environment here

First let us visualize the game and understand the environment.

```
In [6]:   import gymnasium as gym
          import numpy as np
          env = gym.make("InvertedDoublePendulum-v5")
          env.np_random = np.random.RandomState(42)

          eval_env = gym.make("InvertedDoublePendulum-v5", render_mode="rgb_array")
          eval_env.np_random = np.random.RandomState(42)
```
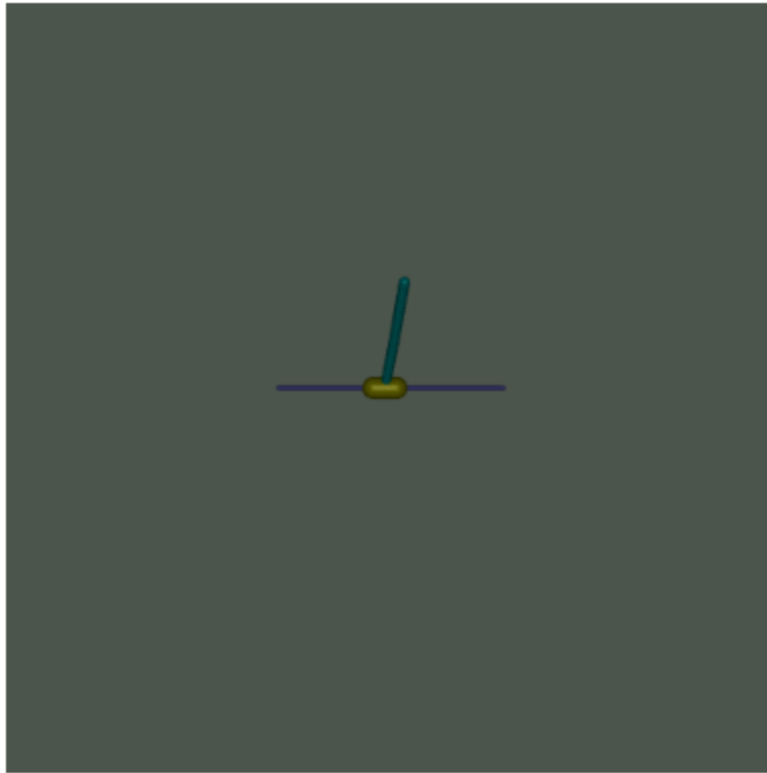
```
In [7]:   from IPython.display import HTML

          frames = []
          s, _ = eval_env.reset()

          while True:
              a = eval_env.action_space.sample()
              s, r, terminated, truncated, _ = eval_env.step(a)
              frames.append(eval_env.render())
              if terminated or truncated:
                  break

          anim = animate(frames)
          HTML(anim.to_jshtml())
```
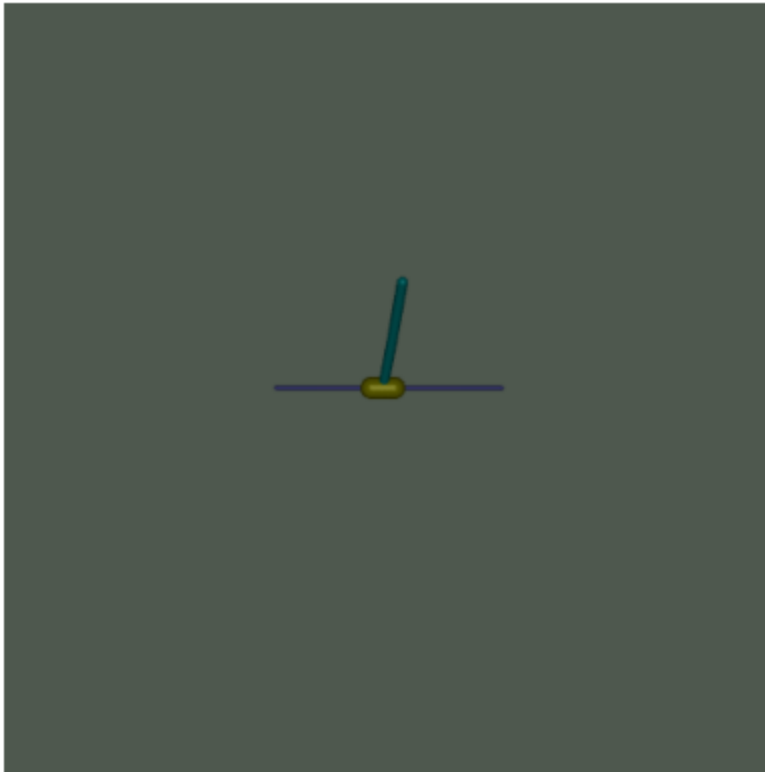
Out[7]:



○ Once  ● Loop  ○ Reflect

# Model (1 point)

Because the inputs to the model is a 9 dimensional vector, we will use a MLP. Specifically we will follow the architecture in the DDPG paper. For DDPG we have both an Actor and a Critic. The Actor is responsible for selecting the action, and the Critic is responsible for evaluating the action.

## Actor

The Actor is a 3 layer MLP:

- Layer 1: 400 units, ReLU activation, Fan-in weight initialization, ie each weight is initialized with a uniform distribution in the range of -1/sqrt(fan_in) to 1/sqrt(fan_in)
- Layer 2: 300 units, ReLU activation, Fan-in weight initialization, ie each weight is initialized with a uniform distribution in the range of -1/sqrt(fan_in) to 1/sqrt(fan_in)
- Layer 3: 1 unit, tanh activation, intialized with uniform weights in the range of -0.003 to 0.003

## Critic

The Critic is a 3 layer MLP:

- Layer 1: 400 units, ReLU activation, Fan-in weight initialization, ie each weight is initialized with a uniform distribution in the range of -1/sqrt(fan_in) to 1/sqrt(fan_in)
- Layer 2: 300 units, ReLU activation, Fan-in weight initialization, ie each weight is initialized with a uniform distribution in the range of -1/sqrt(fan_in) to 1/sqrt(fan_in). Input is the concatenation of the 400 dimension embedding from the state, and the action taken.
- Layer 3: 1 unit, intialized with uniform weights in the range of -0.003 to 0.003

In [8]:
```python
import model
```

# Exploration (1 point)

Because DDPG is an off policy algorithm, we will use a noise process to encourage exploration. Specifically we will use the Ornstein-Uhlenbeck process. The Ornstein-Uhlenbeck process is a stochastic process that generates temporally correlated noise. The process is defined by the following stochastic differential equation: $$dx_t = \theta(\mu - x_t)dt + \sigma dW_t$$ Where $\theta$ is the rate of mean reversion, $\mu$ is the long run mean of the process, $\sigma$ is the volatility of the process, and $W_t$ is a Wiener process. We can discretize this process to get the following: $$x_{t+1} = x_t + \theta(\mu - x_t)dt + \sigma \sqrt{dt}\mathcal{N}(0,1)$$ Where $N(0,1)$ is a sample from the standard normal distribution. We will asume that our steps are of unit length, so we can simplify this to: $$x_{t+1} = x_t + \theta(\mu - x_t) + \sigma \mathcal{N}(0,1)$$ We will use $\theta = 0.15$, $\mu = 0$, and $\sigma = 0.2$. We will add this to our action in the following way $$a_t = \min(\max(\mu(s_t) + x_t, -1), 1)$$ Where $a_t$ is the action taken by the agent, $\mu(s_t)$ is the action selected by the actor, and $x_t$ is the noise generated by the Ornstein-Uhlenbeck process. Please implement the `OU_Noise` class in DDPG.py

# DDPG (3 points total)

We will be implementing the DDPG algorithm. The DDPG algorithm is a model free, off policy algorithm that combines the actor-critic architecture with the insights of DQN. The algorithm is as follows: DDPG Fill in both of the TODO in the `DDPG` class in DDPG.py

In [9]:
```python
import wandb
wandb.login()
```

Out[9]:  True

In [10]:
```python
wandb.init(project="inverted-double-pendulum-ddpg")
```

Tracking run with wandb version 0.19.11

Run data is saved locally in /home/anwesha/239AS_2/Project_4_bonus/wandb/run-20250608_191022-gwntt2um

Syncing run **summer-wind-3** to Weights & Biases (docs)

View project at https://wandb.ai/anwchatto-ucla/inverted-double-pendulum-ddpg

View run at https://wandb.ai/anwchatto-ucla/inverted-double-pendulum-ddpg/runs/gwntt2um

Out[10]:  Display W&B run

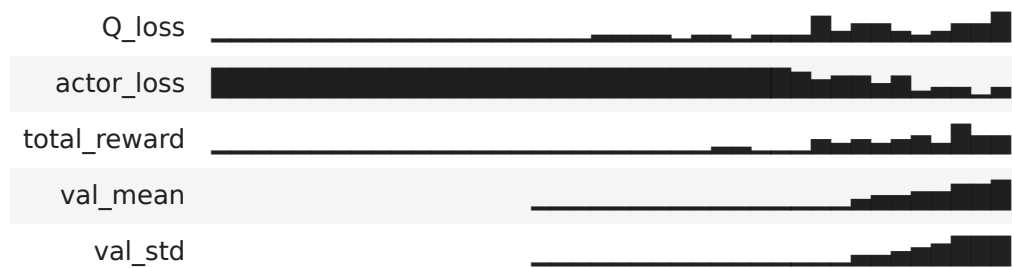In [16]:
```python
import DDPG
import utils
t = DDPG.DDPG(env,
              model.Actor,
              model.Critic,
              use_wandb=True,
              save_path = utils.get_save_path("DDPG","./runs/"))

t.train(10000,
        100,
        100,
        1000,
        100,
        1)
```

 saving to ./runs/DDPG/run10

Finishing previous runs because reinit is set to 'default'.

## Run history:

| | |
|---|---|
| Q_loss | ▁▁▁▁▁▁▁▁▁▁▁▃▃▁▁▂▂▁▆▄▅▃▄▆█ |
| actor_loss | ████████████████████▅▃▄▃▂▂▁ |
| total_reward | ▁▁▁▁▁▁▁▁▁▁▁▁▂▂▁▅▄▅▄▆▄▅ |
| val_mean | ▁▁▁▁▁▁▁▁▁▁▁▅▆▇██ |
| val_std | ▁▁▁▁▁▁▁▁▁▁▅▆▇██ |

## Run summary:

| | |
|---|---|
| Q_loss | 347.12714 |
| actor_loss | -739.87152 |
| total_reward | 90.60519 |
| val_mean | 209.79633 |
| val_std | 65.86641 |

View run **mild-snowball-10** at: https://wandb.ai/anwchatto-ucla/double_pendulum_ddpg/runs/g1gpnm18
View project at: https://wandb.ai/anwchatto-ucla/double_pendulum_ddpg
Synced 5 W&B file(s), 0 media file(s), 0 artifact file(s) and 0 other file(s)
Find logs at: ./wandb/run-20250608_191410-g1gpnm18/logs
Tracking run with wandb version 0.19.11
Run data is saved locally in /home/anwesha/239AS_2/Project_4_bonus/wandb/run-20250608_191707-rsqkh3bd
Syncing run **stellar-glade-11** to Weights & Biases (docs)
View project at https://wandb.ai/anwchatto-ucla/double_pendulum_ddpg
View run at https://wandb.ai/anwchatto-ucla/double_pendulum_ddpg/runs/rsqkh3bd

Episode 0: Time: 0.0042917728424072266, Total Reward: 53.99174959484617, Q Loss: 0, Actor Loss: 0
Episode 1: Time: 0.004436969757080078, Total Reward: 81.94873976669977, Q Loss: 0, Actor Loss: 0
Episode 2: Time: 0.003540515899658203, Total Reward: 63.751895245358156, Q Loss: 0, Actor Loss: 0
Episode 3: Time: 0.003539562225341797, Total Reward: 63.305498440860156, Q Loss: 0, Actor Loss: 0
Episode 4: Time: 0.003203153610229492, Total Reward: 53.818119323199504, Q Loss: 0, Actor Loss: 0
Episode 5: Time: 0.0042400360107421875, Total Reward: 82.47600744317941, Q Loss: 0, Actor Loss: 0
Episode 6: Time: 0.004232883453369141, Total Reward: 82.45374991675449, Q Loss: 0, Actor Loss: 0
Episode 7: Time: 0.04819464683532715, Total Reward: 44.70546854014031, Q Loss: 224.5533905029297, Actor Loss: -0.4763839766383171
Episode 8: Time: 0.07938861846923828, Total Reward: 73.09369525976305, Q Loss: 553.2222023010254, Actor Loss: -13.796590596437454
Episode 9: Time: 0.08833956718444824, Total Reward: 81.99219586923046, Q Loss: 359.6496696472168, Actor Loss: -63.28244233131409
Episode 10: Time: 0.058257102966308594, Total Reward: 53.713409546223716, Q Loss: 209.73431777954102, Actor Loss: -49.99344778060913
Episode 11: Time: 0.041303396224975586, Total Reward: 35.13740657919999, Q Loss: 104.81692695617676, Actor Loss: -29.557590007781982
Episode 12: Time: 0.04110574722290039, Total Reward: 35.64263521542383, Q Loss: 78.74469089508057, Actor Loss: -32.415717124938965
Episode 13: Time: 0.0410923957824707, Total Reward: 34.75061090363531, Q Loss: 52.70606708526611, Actor Loss: -39.56831693649292
Episode 14: Time: 0.041446685791015625, Total Reward: 35.155456435330116, Q Loss: 37.900129318237305, Actor Loss: -42.758734703063965
Episode 15: Time: 0.04071402549743652, Total Reward: 35.496356826637786, Q Loss: 26.47288465499878, Actor Loss: -41.500732421875
Episode 16: Time: 0.03268313407897949, Total Reward: 25.900682003725308, Q Loss: 22.888206958770752, Actor Loss: -33.10095453262329
Episode 17: Time: 0.03267693519592285, Total Reward: 25.71929081418429, Q Loss: 21.325782775878906, Actor Loss: -32.516608238220215
Episode 18: Time: 0.0408782958984375, Total Reward: 35.250678029240774, Q Loss: 24.975919246673584, Actor Loss: -40.379411697387695
Episode 19: Time: 0.03279399871826172, Total Reward: 25.350630761521582, Q Loss: 19.141505241394043, Actor Loss: -31.957386016845703
Episode 20: Time: 0.03340625762939453, Total Reward: 25.448924583649728, Q Loss: 15.334089994430542, Actor Loss: -32.40617370605469
Episode 21: Time: 0.03276324272155762, Total Reward: 25.787615124853755, Q Loss: 17.08643126487732, Actor Loss: -32.8154730796814
Episode 22: Time: 0.032860517501831055, Total Reward: 25.39089294927543, Q Loss: 15.858628273010254, Actor Loss: -30.89072561264038
Episode 23: Time: 0.03266644477844238, Total Reward: 25.109366326650857, Q Loss: 16.580764055252075, Actor Loss: -31.22138786315918
Episode 24: Time: 0.032712697982788086, Total Reward: 25.594356640368662, Q Loss: 11.923059463500977, Actor Loss: -33.32585144042969
Episode 25: Time: 0.032790422439575195, Total Reward: 25.702944188685276, Q Loss: 14.246397018432617, Actor Loss: -31.657506942749023
Episode 26: Time: 0.03270840644836426, Total Reward: 25.34473446734976, Q Loss: 16.504966497421265, Actor Loss: -29.715150356292725
Episode 27: Time: 0.033341407775878906, Total Reward: 25.904438834667907, Q Loss: 14.35268497467041, Actor Loss: -30.75429058074951

Episode 28: Time: 0.032884836196899414, Total Reward: 25.939675418905342, Q Loss: 13.306472063064575, Actor Loss: -33.58066558378906
Episode 29: Time: 0.03253293037414551, Total Reward: 25.18552789920535, Q Loss: 14.150026082992554, Actor Loss: -30.50712776184082
Episode 30: Time: 0.032747745513916016, Total Reward: 25.508589147329886, Q Loss: 11.626346111297607, Actor Loss: -31.35288381576538
Episode 31: Time: 0.03279304504394531, Total Reward: 25.897621932813006, Q Loss: 13.38609266281128, Actor Loss: -31.158664226531982
Episode 32: Time: 0.03260350227355957, Total Reward: 25.308408084820567, Q Loss: 10.377935290336609, Actor Loss: -29.988659858703613
Episode 33: Time: 0.032688140869140625, Total Reward: 25.328896987062848, Q Loss: 11.838375091552734, Actor Loss: -31.288739681243896
Episode 34: Time: 0.03328132629394531, Total Reward: 25.314323078624028, Q Loss: 12.36155366897583, Actor Loss: -31.79518222808838
Episode 35: Time: 0.03280973434448242, Total Reward: 25.51748610797153, Q Loss: 10.86405611038208, Actor Loss: -29.715184688568115
Episode 36: Time: 0.024657011032104492, Total Reward: 16.958858764347234, Q Loss: 8.042535424232483, Actor Loss: -24.38686990737915
Episode 37: Time: 0.03264474868774414, Total Reward: 25.63228620414129, Q Loss: 11.92373251914978, Actor Loss: -29.83984136581421
Episode 38: Time: 0.032724618911743164, Total Reward: 25.316106987388295, Q Loss: 11.228137731552124, Actor Loss: -30.250627517700195
Episode 39: Time: 0.04881715774536133, Total Reward: 44.6929573408805, Q Loss: 17.341837406158447, Actor Loss: -46.16032552719116
Episode 40: Time: 0.03327631950378418, Total Reward: 25.558643642318348, Q Loss: 15.89038634300232, Actor Loss: -27.93602752685547
Episode 41: Time: 0.03267383575439453, Total Reward: 25.525542454728544, Q Loss: 10.579881429672241, Actor Loss: -30.45751142501831
Episode 42: Time: 0.03281712532043457, Total Reward: 25.299886188694632, Q Loss: 11.21914029121399, Actor Loss: -32.04878091812134
Episode 43: Time: 0.024615764617919922, Total Reward: 16.85011764981188, Q Loss: 11.40928864479065, Actor Loss: -22.204126834869385
Episode 44: Time: 0.03272700309753418, Total Reward: 25.385684305924247, Q Loss: 15.2864511013031, Actor Loss: -28.460293292999268
Episode 45: Time: 0.032778263092041016, Total Reward: 26.109238527702768, Q Loss: 13.614869356155396, Actor Loss: -31.07098388671875
Episode 46: Time: 0.03270077705383301, Total Reward: 25.36362498366104, Q Loss: 11.902298212051392, Actor Loss: -29.83899688720703
Episode 47: Time: 0.03841423988342285, Total Reward: 25.70462524544081, Q Loss: 10.532615423202515, Actor Loss: -30.443485260009766
Episode 48: Time: 0.030626535415649414, Total Reward: 16.902854387986213, Q Loss: 12.322145700454712, Actor Loss: -24.479390144348145
Episode 49: Time: 0.04067254066467285, Total Reward: 25.354009089391816, Q Loss: 10.315439701080322, Actor Loss: -30.91253662109375
Episode 50: Time: 0.035332679748535156, Total Reward: 25.63494973643474, Q Loss: 10.225485563278198, Actor Loss: -30.236659049987793
Episode 51: Time: 0.02463555335998535, Total Reward: 16.914136997571497, Q Loss: 10.410043001174927, Actor Loss: -23.487082481384277
Episode 52: Time: 0.03268098831176758, Total Reward: 25.234997439636487, Q Loss: 11.427885055541992, Actor Loss: -29.311511039733887
Episode 53: Time: 0.03302264213562012, Total Reward: 25.327725925650522, Q Loss: 12.973969221115112, Actor Loss: -28.372504234313965
Episode 54: Time: 0.033287763595581055, Total Reward: 25.372072577109726, Q Loss: 10.78084659576416, Actor Loss: -31.078740119934082
Episode 55: Time: 0.03272088958740234, Total Reward: 25.781514277850185, Q Loss: 8.45077121257782, Actor Loss: -30.549010276794434

Episode 56: Time: 0.03287529945373535, Total Reward: 25.437153779294427, Q Loss: 9.041101574897766, Actor Loss: -31.08281946182251
Episode 57: Time: 0.03285527229309082, Total Reward: 25.510644830518007, Q Loss: 8.03889000415802, Actor Loss: -30.1578631401062
Episode 58: Time: 0.032743215560913086, Total Reward: 25.618163763141666, Q Loss: 13.099307298660278, Actor Loss: -28.582111835479736
Episode 59: Time: 0.0247647762298584, Total Reward: 16.88581395478434, Q Loss: 11.015780210494995, Actor Loss: -19.33567476272583
Episode 60: Time: 0.02470564842224121, Total Reward: 16.813516386120735, Q Loss: 6.847736716270447, Actor Loss: -20.61454486846924
Episode 61: Time: 0.033181190490722656, Total Reward: 25.27905799046684, Q Loss: 12.555694341659546, Actor Loss: -29.21393871307373
Episode 62: Time: 0.03278040885925293, Total Reward: 25.366560167053127, Q Loss: 10.534300565719604, Actor Loss: -26.533121585845947
Episode 63: Time: 0.03301572799682617, Total Reward: 25.860827233322546, Q Loss: 8.373154997825623, Actor Loss: -27.68454599380493
Episode 64: Time: 0.032723426818847656, Total Reward: 25.791360932205656, Q Loss: 9.098888158798218, Actor Loss: -29.39012098312378
Episode 65: Time: 0.03278398513793945, Total Reward: 25.59853198505345, Q Loss: 11.47276496887207, Actor Loss: -29.48789691925049
Episode 66: Time: 0.03280782699584961, Total Reward: 25.73447186380762, Q Loss: 12.119331121444702, Actor Loss: -27.656489849090576
Episode 67: Time: 0.03263998031616211, Total Reward: 25.42624148808086, Q Loss: 10.65489661693573, Actor Loss: -30.64516019821167
Episode 68: Time: 0.03325247764587402, Total Reward: 25.450753626548646, Q Loss: 10.803800821304321, Actor Loss: -30.871558666229248
Episode 69: Time: 0.03282785415649414, Total Reward: 25.801350634411417, Q Loss: 10.31846022605896, Actor Loss: -27.53689956665039
Episode 70: Time: 0.032624006271362305, Total Reward: 25.312130921849462, Q Loss: 10.390206098556519, Actor Loss: -29.085676193237305
Episode 71: Time: 0.03300118446350098, Total Reward: 25.446177586415626, Q Loss: 13.282854795455933, Actor Loss: -29.77746820449829
Episode 72: Time: 0.0331425666809082, Total Reward: 25.41620578874007, Q Loss: 10.199878454208374, Actor Loss: -28.555509567260742
Episode 73: Time: 0.032903432846069336, Total Reward: 25.33631377474221, Q Loss: 9.368563652038574, Actor Loss: -30.615842819213867
Episode 74: Time: 0.024564504623413086, Total Reward: 16.95890739732199, Q Loss: 6.859578371047974, Actor Loss: -21.73555040359497
Episode 75: Time: 0.033272504806518555, Total Reward: 25.516138187380495, Q Loss: 9.81390929222107, Actor Loss: -28.42378807067871
Episode 76: Time: 0.02471613883972168, Total Reward: 16.971158001398553, Q Loss: 4.370745480060577, Actor Loss: -23.130724906921387
Episode 77: Time: 0.032792091369628906, Total Reward: 25.251734964770073, Q Loss: 9.34544825553894, Actor Loss: -28.19672155380249
Episode 78: Time: 0.03284716606140137, Total Reward: 25.897920991631057, Q Loss: 11.485061526298523, Actor Loss: -27.682552814483643
Episode 79: Time: 0.03281044960021973, Total Reward: 25.377422204286518, Q Loss: 10.298467993736267, Actor Loss: -30.258054733276367
Episode 80: Time: 0.032796382904052734, Total Reward: 25.439628987260015, Q Loss: 16.084648609161377, Actor Loss: -28.251736164093018
Episode 81: Time: 0.04078412055969238, Total Reward: 34.860553602496665, Q Loss: 16.962993264198303, Actor Loss: -37.97410440444946
Episode 82: Time: 0.03324007987976074, Total Reward: 25.918484458550967, Q Loss: 13.703155279159546, Actor Loss: -27.067914485931396
Episode 83: Time: 0.03268742561340332, Total Reward: 25.353989956329343, Q Loss: 9.797624349594116, Actor Loss: -31.699239253997803

Episode 84: Time: 0.03287553787231445, Total Reward: 25.548236893790673, Q Loss: 8.686042547225952, Actor Loss: -30.117077827453613
Episode 85: Time: 0.0326230525970459, Total Reward: 25.256451359205222, Q Loss: 11.74590277671814, Actor Loss: -28.52144145965576
Episode 86: Time: 0.03253769874572754, Total Reward: 26.31688394577035, Q Loss: 9.9166259765625, Actor Loss: -30.844029426574707
Episode 87: Time: 0.0326080322265625, Total Reward: 25.92270106182268, Q Loss: 11.998270273208618, Actor Loss: -27.427967071533203
Episode 88: Time: 0.024594545364379883, Total Reward: 16.9419272798695, Q Loss: 8.145499467849731, Actor Loss: -22.024707317352295
Episode 89: Time: 0.03333425521850586, Total Reward: 25.148889605226202, Q Loss: 10.312739133834839, Actor Loss: -30.782745838165283
Episode 90: Time: 0.032876014709472656, Total Reward: 25.30278159983012, Q Loss: 14.716773748397827, Actor Loss: -27.479922771453857
Episode 91: Time: 0.03290295600891113, Total Reward: 25.137641537871723, Q Loss: 14.33770489692688, Actor Loss: -29.604640007019043
Episode 92: Time: 0.03264975547790527, Total Reward: 25.975154188150864, Q Loss: 9.375003337860107, Actor Loss: -30.14331293106079
Episode 93: Time: 0.04076838493347168, Total Reward: 35.0624373818355, Q Loss: 10.497294068336487, Actor Loss: -38.92473840713501
Episode 94: Time: 0.03248143196105957, Total Reward: 25.801908633472355, Q Loss: 11.511695086956024, Actor Loss: -28.68252658843994
Episode 95: Time: 0.024642229080200195, Total Reward: 16.87863363353477, Q Loss: 6.097867488861084, Actor Loss: -22.10878038406372
Episode 96: Time: 0.024915695190429688, Total Reward: 16.909433863550852, Q Loss: 8.125421226024628, Actor Loss: -21.120408535003662
Episode 97: Time: 0.03265857696533203, Total Reward: 25.362145487544336, Q Loss: 10.418506979942322, Actor Loss: -30.079715251922607
Episode 98: Time: 0.03263354301452637, Total Reward: 25.338133532899505, Q Loss: 12.244597673416138, Actor Loss: -28.575436115264893
Episode 99: Time: 0.032634735107421875, Total Reward: 25.34681624037009, Q Loss: 9.687536239624023, Actor Loss: -28.438169956207275
Validation Mean: 22.111785996081725, Validation Std: 4.075776413991314
saving model
Episode 100: Time: 0.02491021156311035, Total Reward: 16.8421295975618, Q Loss: 10.809728384017944, Actor Loss: -21.652907371520996
Episode 101: Time: 0.03275179862976074, Total Reward: 25.429509340804902, Q Loss: 10.952265501022339, Actor Loss: -27.358891487121582
Episode 102: Time: 0.02458500862121582, Total Reward: 16.95560678132885, Q Loss: 8.237313032150269, Actor Loss: -21.630104064941406
Episode 103: Time: 0.024593830108642578, Total Reward: 16.947796943453824, Q Loss: 10.73665475845337, Actor Loss: -24.015990734100342
Episode 104: Time: 0.03261685371398926, Total Reward: 26.103069385702725, Q Loss: 10.708932518959045, Actor Loss: -28.8646559715271
Episode 105: Time: 0.03254199028015137, Total Reward: 25.487057674485186, Q Loss: 12.083248615264893, Actor Loss: -33.09665250778198
Episode 106: Time: 0.024829626083374023, Total Reward: 16.948278143059007, Q Loss: 5.949700832366943, Actor Loss: -23.36729097366333
Episode 107: Time: 0.024591684341430664, Total Reward: 16.8596755132309, Q Loss: 9.423342227935791, Actor Loss: -21.565552711486816
Episode 108: Time: 0.0326690673828125, Total Reward: 26.068991914205398, Q Loss: 13.070899486541748, Actor Loss: -28.579542636871338
Episode 109: Time: 0.04051613807678223, Total Reward: 35.61817670669562, Q Loss: 13.825265645980835, Actor Loss: -36.269747257232666
Episode 110: Time: 0.03258395195007324, Total Reward: 25.358454210306505, Q Loss: 11.340790748596191, Actor Loss: -29.413241863250732

Episode 111: Time: 0.03262758255004883, Total Reward: 25.801668518552187, Q Loss: 8.085243105888367, Actor Loss: -31.45424747467041
Episode 112: Time: 0.04089045524597168, Total Reward: 35.34595971261311, Q Loss: 13.100952386856079, Actor Loss: -38.23904228210449
Episode 113: Time: 0.03261160850524902, Total Reward: 25.76448813221604, Q Loss: 10.502846002578735, Actor Loss: -28.693617343902588
Episode 114: Time: 0.09792518615722656, Total Reward: 101.09356875089469, Q Loss: 35.572898149490356, Actor Loss: -88.42288446426392
Episode 115: Time: 0.05684709548950195, Total Reward: 53.56055574052619, Q Loss: 17.57340395450592, Actor Loss: -56.089149951934814
Episode 116: Time: 0.06516408920288086, Total Reward: 63.41238749409308, Q Loss: 20.467225313186646, Actor Loss: -64.25069427490234
Episode 117: Time: 0.048575401306152344, Total Reward: 44.84390660828955, Q Loss: 23.201971769332886, Actor Loss: -44.67084264755249
Episode 118: Time: 0.0727851390838623, Total Reward: 72.73651182532292, Q Loss: 27.89519500732422, Actor Loss: -73.97324991226196
Episode 119: Time: 0.03257107734680176, Total Reward: 26.10947168827629, Q Loss: 8.897555947303772, Actor Loss: -28.92093849182129
Episode 120: Time: 0.03275060653686523, Total Reward: 25.928111093980263, Q Loss: 11.972622156143188, Actor Loss: -32.81585359573364
Episode 121: Time: 0.03291773796081543, Total Reward: 25.916040500296802, Q Loss: 11.213154315948486, Actor Loss: -31.89097023010254
Episode 122: Time: 0.032668113708496094, Total Reward: 25.845766213598072, Q Loss: 13.015277981758118, Actor Loss: -34.08006191253662
Episode 123: Time: 0.03247499465942383, Total Reward: 25.591070503123845, Q Loss: 13.357512831687927, Actor Loss: -32.592602252960205
Episode 124: Time: 0.03253340721130371, Total Reward: 25.529933712804368, Q Loss: 9.116421937942505, Actor Loss: -29.603675842285156
Episode 125: Time: 0.0487368106842041, Total Reward: 44.48707718849304, Q Loss: 17.429075360298157, Actor Loss: -47.2356915473938
Episode 126: Time: 0.032594919204711914, Total Reward: 25.565164280048606, Q Loss: 10.628992557525635, Actor Loss: -32.98878192901611
Episode 127: Time: 0.03309178352355957, Total Reward: 25.41499078147548, Q Loss: 15.489105701446533, Actor Loss: -30.753014087677002
Episode 128: Time: 0.024488210678100586, Total Reward: 16.882561514519793, Q Loss: 5.830172061920166, Actor Loss: -26.85193157196045
Episode 129: Time: 0.03264021873474121, Total Reward: 25.315779634503624, Q Loss: 15.379627227783203, Actor Loss: -34.01619625091553
Episode 130: Time: 0.0326991081237793, Total Reward: 25.525036101537882, Q Loss: 12.740890979766846, Actor Loss: -31.430109977722168
Episode 131: Time: 0.032788753509521484, Total Reward: 25.55514169768267, Q Loss: 16.1541748046875, Actor Loss: -31.966309070587158
Episode 132: Time: 0.03277873992919922, Total Reward: 25.65065486950715, Q Loss: 11.399743437767029, Actor Loss: -33.31105899810791
Episode 133: Time: 0.024451255798339844, Total Reward: 16.915065814552563, Q Loss: 8.331950187683105, Actor Loss: -23.840778827667236
Episode 134: Time: 0.02507925033569336, Total Reward: 16.857682084896986, Q Loss: 8.524282097816467, Actor Loss: -25.49707794189453
Episode 135: Time: 0.024563312530517578, Total Reward: 16.929949895525954, Q Loss: 8.766348600387573, Actor Loss: -23.55918598175049
Episode 136: Time: 0.03254556655883789, Total Reward: 25.85135340126617, Q Loss: 12.29567039012909, Actor Loss: -31.790494441986084
Episode 137: Time: 0.024481773376464844, Total Reward: 16.981255175402932, Q Loss: 5.483087062835693, Actor Loss: -27.159975051879883
Episode 138: Time: 0.03259539604187012, Total Reward: 25.300519290653003, Q Loss: 14.184958934783936, Actor Loss: -33.67486619949341

Episode 139: Time: 0.024637460708618164, Total Reward: 16.94095428519784, Q Loss: 8.482357501983643, Actor Loss: -24.78817081451416
Episode 140: Time: 0.03281235694885254, Total Reward: 25.224852022514703, Q Loss: 11.6158607006073, Actor Loss: -29.691718101501465
Episode 141: Time: 0.033394813537597656, Total Reward: 25.654954561788124, Q Loss: 17.56438422203064, Actor Loss: -28.649261474609375
Episode 142: Time: 0.032662391662597656, Total Reward: 25.50093009197293, Q Loss: 11.82371437549591, Actor Loss: -34.72615051269531
Episode 143: Time: 0.032587289810180664, Total Reward: 26.16513109410461, Q Loss: 10.573068618774414, Actor Loss: -34.358275413513184
Episode 144: Time: 0.03266429901123047, Total Reward: 26.29273682950493, Q Loss: 12.62411093711853, Actor Loss: -30.134053707122803
Episode 145: Time: 0.03293919563293457, Total Reward: 25.731522726437216, Q Loss: 13.90472412109375, Actor Loss: -32.26110219955444
Episode 146: Time: 0.032741546630859375, Total Reward: 26.319529946004614, Q Loss: 14.895515203475952, Actor Loss: -33.96832609176636
Episode 147: Time: 0.024692773818969727, Total Reward: 16.886372169506267, Q Loss: 7.651872396469116, Actor Loss: -22.49470329284668
Episode 148: Time: 0.03301048278808594, Total Reward: 25.571213460009762, Q Loss: 15.028135061264038, Actor Loss: -32.91976022720337
Episode 149: Time: 0.032685279846191406, Total Reward: 25.202202586516755, Q Loss: 8.935662746429443, Actor Loss: -31.736807346343994
Episode 150: Time: 0.03278231620788574, Total Reward: 25.781740984836038, Q Loss: 8.333151936531067, Actor Loss: -32.80864381790161
Episode 151: Time: 0.03270578384399414, Total Reward: 25.4762597540317, Q Loss: 7.680313467979431, Actor Loss: -30.94753885269165
Episode 152: Time: 0.03266334533691406, Total Reward: 25.34212112248788, Q Loss: 10.55789303779602, Actor Loss: -32.96851348876953
Episode 153: Time: 0.032655954360961914, Total Reward: 25.734676193191508, Q Loss: 12.684300422668457, Actor Loss: -30.47699785232544
Episode 154: Time: 0.03267645835876465, Total Reward: 25.114418035543252, Q Loss: 14.633152961730957, Actor Loss: -33.74654722213745
Episode 155: Time: 0.03327584266662598, Total Reward: 25.832025774335058, Q Loss: 13.178738474845886, Actor Loss: -32.73696041107178
Episode 156: Time: 0.03286337852478027, Total Reward: 25.322349924514214, Q Loss: 13.721002101898193, Actor Loss: -30.651360511779785
Episode 157: Time: 0.03278517723083496, Total Reward: 25.36740013608707, Q Loss: 11.033111572265625, Actor Loss: -30.443085193634033
Episode 158: Time: 0.0248260498046875, Total Reward: 16.876515225203157, Q Loss: 9.148367166519165, Actor Loss: -25.563448429107666
Episode 159: Time: 0.032942771911621094, Total Reward: 25.317123621434344, Q Loss: 13.06287956237793, Actor Loss: -33.172861099243164
Episode 160: Time: 0.024810791015625, Total Reward: 16.9255948269998, Q Loss: 7.893542289733887, Actor Loss: -22.101423740386963
Episode 161: Time: 0.033052921295166016, Total Reward: 26.288598863685706, Q Loss: 11.05481743812561, Actor Loss: -31.992527961730957
Episode 162: Time: 0.025368690490722656, Total Reward: 16.89565762572619, Q Loss: 6.264288902282715, Actor Loss: -25.996094226837158
Episode 163: Time: 0.033016204833984375, Total Reward: 25.35627008595492, Q Loss: 15.462549686431885, Actor Loss: -30.622862815856934
Episode 164: Time: 0.03305172920227051, Total Reward: 25.35745355946738, Q Loss: 14.296166896820068, Actor Loss: -31.385538578033447
Episode 165: Time: 0.03300881385803223, Total Reward: 25.443583043638757, Q Loss: 15.840725421905518, Actor Loss: -30.13150405883789
Episode 166: Time: 0.03306245803833008, Total Reward: 25.809046538905925, Q Loss: 8.98525881767273, Actor Loss: -34.25743770599365

Episode 167: Time: 0.03335762023925781, Total Reward: 25.294672345877597, Q Loss: 10.816329717636108, Actor Loss: -30.18335199356079
Episode 168: Time: 0.03321242332458496, Total Reward: 25.544079259799197, Q Loss: 15.82167363166809, Actor Loss: -30.505905628204346
Episode 169: Time: 0.025478839874267578, Total Reward: 16.919892918945646, Q Loss: 12.298969984054565, Actor Loss: -23.66547393798828
Episode 170: Time: 0.03339505195617676, Total Reward: 25.29037556003823, Q Loss: 14.152796745300293, Actor Loss: -32.791964530944824
Episode 171: Time: 0.03344249725341797, Total Reward: 25.990761509362898, Q Loss: 14.006821632385254, Actor Loss: -34.293182373046875
Episode 172: Time: 0.03350520133972168, Total Reward: 25.709160775979235, Q Loss: 13.528408765792847, Actor Loss: -31.62807846069336
Episode 173: Time: 0.03339695930480957, Total Reward: 26.2301562632661, Q Loss: 15.599354267120361, Actor Loss: -34.809080600738525
Episode 174: Time: 0.033387184143066406, Total Reward: 25.16996982433043, Q Loss: 9.987218976020813, Actor Loss: -31.40981912612915
Episode 175: Time: 0.03375577926635742, Total Reward: 25.210765725656106, Q Loss: 12.312308132648468, Actor Loss: -32.189945220947266
Episode 176: Time: 0.03385615348815918, Total Reward: 25.20301675372589, Q Loss: 11.376361012458801, Actor Loss: -33.9222297668457
Episode 177: Time: 0.033661603927612305, Total Reward: 25.39136322380268, Q Loss: 8.797867059707642, Actor Loss: -33.053003787994385
Episode 178: Time: 0.033692121505737305, Total Reward: 25.257315936227005, Q Loss: 11.337494373321533, Actor Loss: -32.597285747528076
Episode 179: Time: 0.02559494972229004, Total Reward: 16.942999915302785, Q Loss: 8.236079931259155, Actor Loss: -23.70918369293213
Episode 180: Time: 0.033736228942871094, Total Reward: 25.781175019005666, Q Loss: 10.624098300933838, Actor Loss: -34.198951721191406
Episode 181: Time: 0.033792734146118164, Total Reward: 25.459463946350485, Q Loss: 10.880847811698914, Actor Loss: -33.827484130859375
Episode 182: Time: 0.025753021240234375, Total Reward: 16.899730718263562, Q Loss: 7.378723859786987, Actor Loss: -24.171998977661133
Episode 183: Time: 0.0254971981048584, Total Reward: 16.85255585468938, Q Loss: 7.926346063613892, Actor Loss: -26.30646800994873
Episode 184: Time: 0.03390669822692871, Total Reward: 25.197010937658472, Q Loss: 14.87874174118042, Actor Loss: -31.844550609588623
Episode 185: Time: 0.03379011154174805, Total Reward: 25.565635306205117, Q Loss: 8.004812002182007, Actor Loss: -33.7986421585083
Episode 186: Time: 0.033807992935180664, Total Reward: 25.3243691043968, Q Loss: 11.20590853691101, Actor Loss: -32.87217426300049
Episode 187: Time: 0.025507688522338867, Total Reward: 16.94442931241273, Q Loss: 6.736380696296692, Actor Loss: -23.601553916931152
Episode 188: Time: 0.03380918502807617, Total Reward: 25.40063301346055, Q Loss: 11.88152265548706, Actor Loss: -30.826939582824707
Episode 189: Time: 0.03442788124084473, Total Reward: 25.837597137497095, Q Loss: 12.30687952041626, Actor Loss: -34.72139310836792
Episode 190: Time: 0.02555108070373535, Total Reward: 16.90904660773778, Q Loss: 11.035295486450195, Actor Loss: -22.518885612487793
Episode 191: Time: 0.033965349197387695, Total Reward: 25.1394451910215, Q Loss: 13.488473892211914, Actor Loss: -33.731218338012695
Episode 192: Time: 0.033898115158081055, Total Reward: 25.381068112441334, Q Loss: 12.268640160560608, Actor Loss: -32.14096975326538
Episode 193: Time: 0.02556777000427246, Total Reward: 16.93642462299573, Q Loss: 6.509015440940857, Actor Loss: -25.695507049560547
Episode 194: Time: 0.03398776054382324, Total Reward: 25.570186897573716, Q Loss: 10.748014330863953, Actor Loss: -31.55271816253662

Episode 195: Time: 0.03397178649902344, Total Reward: 25.837626055009505, Q Loss: 10.054086923599243, Actor Loss: -32.19544458389282
Episode 196: Time: 0.034183502197265625, Total Reward: 25.15063730541044, Q Loss: 12.838122844696045, Actor Loss: -32.5009765625
Episode 197: Time: 0.03413510322570801, Total Reward: 25.2091290691915, Q Loss: 11.06081247329712, Actor Loss: -33.49848175048828
Episode 198: Time: 0.025722503662109375, Total Reward: 16.8972031508806, Q Loss: 10.672445058822632, Actor Loss: -23.69984769821167
Episode 199: Time: 0.025685548782348633, Total Reward: 16.92623388619352, Q Loss: 8.781638622283936, Actor Loss: -22.980185508728027
Validation Mean: 20.738878543969772, Validation Std: 4.163995040635453
saving model
Episode 200: Time: 0.03434181213378906, Total Reward: 25.77763823056435, Q Loss: 13.7219979763031, Actor Loss: -32.81165790557861
Episode 201: Time: 0.03395485877990723, Total Reward: 25.349953294861404, Q Loss: 11.302177429199219, Actor Loss: -34.68457508087158
Episode 202: Time: 0.033951759338378906, Total Reward: 25.162790496311942, Q Loss: 11.6755131483078, Actor Loss: -31.221991062164307
Episode 203: Time: 0.03406238555908203, Total Reward: 25.723496649739694, Q Loss: 13.090705871582031, Actor Loss: -32.020543575286865
Episode 204: Time: 0.03429818153381348, Total Reward: 25.404093996245496, Q Loss: 9.006202697753906, Actor Loss: -33.164119720458984
Episode 205: Time: 0.02601909637451172, Total Reward: 16.936238002339806, Q Loss: 6.296779036521912, Actor Loss: -25.286771774291992
Episode 206: Time: 0.034116268157958984, Total Reward: 26.062565423174068, Q Loss: 12.518634915351868, Actor Loss: -32.48173999786377
Episode 207: Time: 0.03387618064880371, Total Reward: 25.5589126892891, Q Loss: 10.069111824035645, Actor Loss: -34.85008907318115
Episode 208: Time: 0.033906698226928571, Total Reward: 25.128665507629027, Q Loss: 8.257206320762634, Actor Loss: -32.9886474609375
Episode 209: Time: 0.025892019271850586, Total Reward: 16.879476723521144, Q Loss: 9.775378227233887, Actor Loss: -24.608924865722656
Episode 210: Time: 0.025604248046875, Total Reward: 16.86588721956379, Q Loss: 10.71540117263794, Actor Loss: -22.041243076324463
Episode 211: Time: 0.02567315101623535, Total Reward: 16.831231373546128, Q Loss: 5.49596095085144, Actor Loss: -25.048072338104248
Episode 212: Time: 0.034551143646240234, Total Reward: 25.31145169457167, Q Loss: 6.860495567321777, Actor Loss: -33.49068784713745
Episode 213: Time: 0.025532007217407227, Total Reward: 16.92425711811101, Q Loss: 6.7929688692092896, Actor Loss: -25.911452293395996
Episode 214: Time: 0.025443553924560547, Total Reward: 16.889723438104227, Q Loss: 8.60348653793335, Actor Loss: -25.043895721435547
Episode 215: Time: 0.03399944305419922, Total Reward: 25.24611601978989, Q Loss: 10.7059485912323, Actor Loss: -31.805903434753418
Episode 216: Time: 0.025415897369384766, Total Reward: 16.869720970249055, Q Loss: 8.18959665298462, Actor Loss: -23.256904125213623
Episode 217: Time: 0.033828020095825195, Total Reward: 25.439894988893826, Q Loss: 7.301336944103241, Actor Loss: -32.316468238830566
Episode 218: Time: 0.025394439697265625, Total Reward: 16.957168920924627, Q Loss: 6.337045431137085, Actor Loss: -22.177011013031006
Episode 219: Time: 0.03416705131530762, Total Reward: 25.29723665986619, Q Loss: 11.037135124206543, Actor Loss: -36.126404762268066
Episode 220: Time: 0.033469200134277344, Total Reward: 25.735624016692007, Q Loss: 11.892030239105225, Actor Loss: -34.5396146774292
Episode 221: Time: 0.033399343490600586, Total Reward: 26.028746285263278, Q Loss: 9.020960807800293, Actor Loss: -32.971593379974365

Episode 222: Time: 0.03336477279663086, Total Reward: 25.408084898493573, Q Loss: 11.523049592971802, Actor Loss: -32.64915752410889
Episode 223: Time: 0.03334760665893555, Total Reward: 26.24715652960907, Q Loss: 14.429271221160889, Actor Loss: -31.620169639587402
Episode 224: Time: 0.03329873085021973, Total Reward: 25.325658459318205, Q Loss: 15.521986961364746, Actor Loss: -31.158952713012695
Episode 225: Time: 0.025138139724731445, Total Reward: 16.840661410627384, Q Loss: 7.748059272766113, Actor Loss: -23.128921508789062
Episode 226: Time: 0.03366661071777344, Total Reward: 25.48339265109368, Q Loss: 10.006765484809875, Actor Loss: -31.209505558013916
Episode 227: Time: 0.03333902359008789, Total Reward: 25.26102647056326, Q Loss: 10.720704674720764, Actor Loss: -33.91550159454346
Episode 228: Time: 0.033274173736572266, Total Reward: 25.441593529477817, Q Loss: 12.772369146347046, Actor Loss: -31.181888580322266
Episode 229: Time: 0.03332042694091797, Total Reward: 25.12120374166113, Q Loss: 11.753736972808838, Actor Loss: -34.463356494903564
Episode 230: Time: 0.0250241756439209, Total Reward: 16.796932275222183, Q Loss: 9.384037017822266, Actor Loss: -23.999011039733887
Episode 231: Time: 0.025028705596923828, Total Reward: 16.87516815642291, Q Loss: 7.302877068519592, Actor Loss: -24.39039182662964
Episode 232: Time: 0.02512049674987793, Total Reward: 17.006824191463792, Q Loss: 8.068475365638733, Actor Loss: -25.752415657043457
Episode 233: Time: 0.03366398811340332, Total Reward: 25.683350627131187, Q Loss: 11.469327330589294, Actor Loss: -32.455819606781006
Episode 234: Time: 0.03335165977478027, Total Reward: 25.748258557849596, Q Loss: 10.416466474533081, Actor Loss: -33.84753608703613
Episode 235: Time: 0.041617631912231445, Total Reward: 35.17503980862752, Q Loss: 12.625650763511658, Actor Loss: -42.28978776931763
Episode 236: Time: 0.03331732749938965, Total Reward: 25.54991815040068, Q Loss: 14.140735864639282, Actor Loss: -31.14604949951172
Episode 237: Time: 0.025141239166259766, Total Reward: 16.805761583011027, Q Loss: 8.088126182556152, Actor Loss: -24.841793060302734
Episode 238: Time: 0.03332066535949707, Total Reward: 25.47090570809406, Q Loss: 11.472007274627686, Actor Loss: -33.0430326461792
Episode 239: Time: 0.03378582000732422, Total Reward: 25.941173894248948, Q Loss: 13.635904550552368, Actor Loss: -31.956385135650635
Episode 240: Time: 0.025269269943237305, Total Reward: 16.81441938077952, Q Loss: 10.19535756111145, Actor Loss: -23.774024963378906
Episode 241: Time: 0.033286333084106445, Total Reward: 25.357634298318718, Q Loss: 12.87747597694397, Actor Loss: -34.7300820350647
Episode 242: Time: 0.03336834907531738, Total Reward: 25.19003347572138, Q Loss: 10.183283567428589, Actor Loss: -29.18284034729004
Episode 243: Time: 0.03338217735290527, Total Reward: 25.30987102614565, Q Loss: 11.120105981826782, Actor Loss: -35.473347187042236
Episode 244: Time: 0.025121212005615234, Total Reward: 16.922219803859672, Q Loss: 7.706219673156738, Actor Loss: -27.0283784866333
Episode 245: Time: 0.03342723846435547, Total Reward: 25.515637462621314, Q Loss: 12.239096641540527, Actor Loss: -30.176601886749268
Episode 246: Time: 0.025818586349487305, Total Reward: 16.927679495229924, Q Loss: 9.52038061618805, Actor Loss: -25.825181007385254
Episode 247: Time: 0.025143146514892578, Total Reward: 17.00040293716359, Q Loss: 10.996687650680542, Actor Loss: -25.804481029510498
Episode 248: Time: 0.025217533111572266, Total Reward: 16.914295207517505, Q Loss: 11.62289834022522, Actor Loss: -22.029659748077393
Episode 249: Time: 0.02522444725036621, Total Reward: 16.903514896795464, Q Loss: 5.710899829864502, Actor Loss: -23.48444700241089

Episode 250: Time: 0.03346824645996094, Total Reward: 25.950591276499516, Q Loss: 11.633093357086182, Actor Loss: -31.84036922454834
Episode 251: Time: 0.025127410888671875, Total Reward: 16.802643731126498, Q Loss: 8.78767442703247, Actor Loss: -24.86983299255371
Episode 252: Time: 0.03339815139770508, Total Reward: 25.22849876947493, Q Loss: 8.410309553146362, Actor Loss: -32.82002067565918
Episode 253: Time: 0.03394794464111328, Total Reward: 25.292243881605224, Q Loss: 9.04937744140625, Actor Loss: -34.9766321182251
Episode 254: Time: 0.03335404396057129, Total Reward: 25.53551371083653, Q Loss: 7.546446442604065, Actor Loss: -34.822463035583496
Episode 255: Time: 0.03331732749938965, Total Reward: 25.28509415163145, Q Loss: 9.929698467254639, Actor Loss: -32.58298873901367
Episode 256: Time: 0.03346109390258789, Total Reward: 25.735462958331755, Q Loss: 7.876432359218597, Actor Loss: -34.73480987548828
Episode 257: Time: 0.025210142135620117, Total Reward: 16.865116397968325, Q Loss: 11.673696041107178, Actor Loss: -26.15981960296631
Episode 258: Time: 0.03346705436706543, Total Reward: 26.306084606972153, Q Loss: 14.056214094161987, Actor Loss: -30.761765956878662
Episode 259: Time: 0.033542633056640625, Total Reward: 26.105599666808832, Q Loss: 9.703465580940247, Actor Loss: -33.184433460235596
Episode 260: Time: 0.02528095245361328, Total Reward: 16.97260903060189, Q Loss: 5.718976378440857, Actor Loss: -25.040622234344482
Episode 261: Time: 0.03357267379760742, Total Reward: 25.59628490152083, Q Loss: 8.89807939529419, Actor Loss: -33.90518569946289
Episode 262: Time: 0.03336620330810547, Total Reward: 25.98213139864172, Q Loss: 8.706557869911194, Actor Loss: -33.75634431838989
Episode 263: Time: 0.03349733352661133, Total Reward: 25.697896722272432, Q Loss: 6.830079555511475, Actor Loss: -31.008439540863037
Episode 264: Time: 0.033443450927734375, Total Reward: 25.203649293580167, Q Loss: 10.784807920455933, Actor Loss: -35.144253730773926
Episode 265: Time: 0.033385276794433594, Total Reward: 25.530895228770966, Q Loss: 10.423044443130493, Actor Loss: -32.70364046096802
Episode 266: Time: 0.025273799896240234, Total Reward: 16.951245852505906, Q Loss: 8.389707565307617, Actor Loss: -23.547884464263916
Episode 267: Time: 0.03408479690551758, Total Reward: 25.45683203215535, Q Loss: 8.438405513763428, Actor Loss: -34.15087413787842
Episode 268: Time: 0.025252103805541992, Total Reward: 16.91707162510353, Q Loss: 6.629086017608643, Actor Loss: -25.917722702026367
Episode 269: Time: 0.033550262451171875, Total Reward: 25.209237625616293, Q Loss: 8.332013964653015, Actor Loss: -32.05042505264282
Episode 270: Time: 0.03367733955383301, Total Reward: 25.510644442851632, Q Loss: 10.748862981796265, Actor Loss: -33.31221580505371
Episode 271: Time: 0.0342555046081543, Total Reward: 25.315635757044603, Q Loss: 8.503784656524658, Actor Loss: -34.34953212738037
Episode 272: Time: 0.02538275718688965, Total Reward: 16.869286398780392, Q Loss: 7.146832704544067, Actor Loss: -25.345475673675537
Episode 273: Time: 0.03367018699645996, Total Reward: 25.175217390161578, Q Loss: 12.553963661193848, Actor Loss: -30.497626781463623
Episode 274: Time: 0.025903701782226562, Total Reward: 16.94973098609637, Q Loss: 5.549347996711731, Actor Loss: -24.859477996826172
Episode 275: Time: 0.025478601455688477, Total Reward: 16.939441063425242, Q Loss: 7.555103659629822, Actor Loss: -25.51752233505249
Episode 276: Time: 0.03383588790893555, Total Reward: 25.447816522002128, Q Loss: 7.973233580589294, Actor Loss: -33.500532150268555
Episode 277: Time: 0.02542257308959961, Total Reward: 16.9116550125678, Q Loss: 5.375425934791565, Actor Loss: -23.977176666259766

Episode 278: Time: 0.02545475959777832, Total Reward: 16.863958454681026, Q Loss: 6.697115898132324, Actor Loss: -26.087376594543457
Episode 279: Time: 0.03382158279418945, Total Reward: 25.686319726976382, Q Loss: 12.504433155059814, Actor Loss: -31.670289039611816
Episode 280: Time: 0.03392815589904785, Total Reward: 25.210775127991088, Q Loss: 9.214315295219421, Actor Loss: -33.20628643035889
Episode 281: Time: 0.034342050552368164, Total Reward: 25.581821578753186, Q Loss: 9.192867279052734, Actor Loss: -33.852901458740234
Episode 282: Time: 0.03398585319519043, Total Reward: 26.021158432283347, Q Loss: 9.151628613471985, Actor Loss: -32.279786109924316
Episode 283: Time: 0.034195899963378906, Total Reward: 25.657580761027063, Q Loss: 7.863964200019836, Actor Loss: -34.60449695587158
Episode 284: Time: 0.025636672973632812, Total Reward: 16.88183755069537, Q Loss: 5.135728716850281, Actor Loss: -24.407104015350342
Episode 285: Time: 0.03411054611206055, Total Reward: 25.877702668960698, Q Loss: 7.146164536476135, Actor Loss: -33.42536640167236
Episode 286: Time: 0.03413081169128418, Total Reward: 25.374915624515236, Q Loss: 7.421382546424866, Actor Loss: -34.76303291320801
Episode 287: Time: 0.02568984031677246, Total Reward: 16.786503263587285, Q Loss: 7.606125593185425, Actor Loss: -24.835057258605957
Episode 288: Time: 0.034656524658203125, Total Reward: 25.21220434076854, Q Loss: 6.919442117214203, Actor Loss: -34.78920841217041
Episode 289: Time: 0.03426933288574219, Total Reward: 25.88691197298709, Q Loss: 5.948342382907867, Actor Loss: -30.30084991455078
Episode 290: Time: 0.0341792106628418, Total Reward: 25.622956485013848, Q Loss: 5.9642093777656555, Actor Loss: -34.20740222930908
Episode 291: Time: 0.034177541732788086, Total Reward: 25.922765530580065, Q Loss: 9.280967473983765, Actor Loss: -33.71767807006836
Episode 292: Time: 0.025800466537475586, Total Reward: 16.92867770192671, Q Loss: 5.101485371589661, Actor Loss: -26.175589561462402
Episode 293: Time: 0.025742769241333008, Total Reward: 16.93861162253016, Q Loss: 5.978069424629211, Actor Loss: -24.06141757965088
Episode 294: Time: 0.034516334533691406, Total Reward: 25.40942003005351, Q Loss: 10.65802550315857, Actor Loss: -33.81087636947632
Episode 295: Time: 0.026212215423583984, Total Reward: 16.80570663661506, Q Loss: 7.43899941444397, Actor Loss: -23.690009593963623
Episode 296: Time: 0.026047945022583008, Total Reward: 16.9391566301073, Q Loss: 9.789221286773682, Actor Loss: -24.127018451690674
Episode 297: Time: 0.025919198989868164, Total Reward: 16.966200273635362, Q Loss: 8.70032000541687, Actor Loss: -25.684353351593018
Episode 298: Time: 0.03440141677856445, Total Reward: 25.667613264818883, Q Loss: 9.564220786094666, Actor Loss: -31.416465759277344
Episode 299: Time: 0.0343780517578125, Total Reward: 25.89582270615137, Q Loss: 10.319473028182983, Actor Loss: -33.41250562667847
Validation Mean: 21.923250098958462, Validation Std: 4.102571635252033
saving model
Episode 300: Time: 0.026014328002929688, Total Reward: 16.97927126669331, Q Loss: 6.867145657539368, Actor Loss: -27.339486122131348
Episode 301: Time: 0.034446001052856445, Total Reward: 25.39931552623685, Q Loss: 8.472718596458435, Actor Loss: -33.09749698638916
Episode 302: Time: 0.034354209899902344, Total Reward: 25.254398377697054, Q Loss: 9.906921982765198, Actor Loss: -35.62239742279053
Episode 303: Time: 0.03444719314575195, Total Reward: 25.3080130967127, Q Loss: 8.008689880371094, Actor Loss: -31.44005250930786
Episode 304: Time: 0.03441452980041504, Total Reward: 25.387357243534883, Q Loss: 9.91346561908722, Actor Loss: -34.137152671813965

Episode 305: Time: 0.03501319885253906, Total Reward: 25.33378042812062, Q Loss: 6.1854248046875, Actor Loss: -36.74552822113037
Episode 306: Time: 0.02599787712097168, Total Reward: 16.84566223285971, Q Loss: 9.933932304382324, Actor Loss: -24.04893398284912
Episode 307: Time: 0.026057958602905273, Total Reward: 16.970753446294548, Q Loss: 6.105945110321045, Actor Loss: -26.855098724365234
Episode 308: Time: 0.03460431098937988, Total Reward: 25.995509098593438, Q Loss: 10.032144904136658, Actor Loss: -33.224852561950684
Episode 309: Time: 0.03454899787902832, Total Reward: 25.48308155420868, Q Loss: 8.245286345481873, Actor Loss: -34.12633943557739
Episode 310: Time: 0.034990787506103516, Total Reward: 25.3603309106438, Q Loss: 7.734575033187866, Actor Loss: -33.97574234008789
Episode 311: Time: 0.03454017639160156, Total Reward: 25.508214526207603, Q Loss: 9.736752152442932, Actor Loss: -34.93810224533081
Episode 312: Time: 0.035120487213134766, Total Reward: 25.16937685189423, Q Loss: 9.032403826713562, Actor Loss: -34.0830979347229
Episode 313: Time: 0.03464913368225098, Total Reward: 25.857987668551985, Q Loss: 7.692964553833008, Actor Loss: -33.507028102874756
Episode 314: Time: 0.03456377983093262, Total Reward: 25.881772613095855, Q Loss: 7.801697015762329, Actor Loss: -34.159510135650635
Episode 315: Time: 0.03466463088989258, Total Reward: 25.4635426145748, Q Loss: 9.313118696212769, Actor Loss: -34.436540603637695
Episode 316: Time: 0.034662723541259766, Total Reward: 25.397226506006426, Q Loss: 10.768691897392273, Actor Loss: -35.01215076446533
Episode 317: Time: 0.03467297554016113, Total Reward: 25.615824937622193, Q Loss: 12.324172258377075, Actor Loss: -35.89514398574829
Episode 318: Time: 0.03496265411376953, Total Reward: 25.469158717201235, Q Loss: 12.023034453392029, Actor Loss: -31.905803203582764
Episode 319: Time: 0.034673452377319336, Total Reward: 25.72413372134249, Q Loss: 8.562352180480957, Actor Loss: -36.985405921936035
Episode 320: Time: 0.03470420837402344, Total Reward: 25.163677433656616, Q Loss: 10.211557269096375, Actor Loss: -34.17527151107788
Episode 321: Time: 0.0345766544342041, Total Reward: 25.533142817872648, Q Loss: 14.783007860183716, Actor Loss: -35.05731964111328
Episode 322: Time: 0.03440999984741211, Total Reward: 25.422472455094052, Q Loss: 8.25807797908783, Actor Loss: -33.46566343307495
Episode 323: Time: 0.034638166427612305, Total Reward: 25.942765659057933, Q Loss: 6.250003218650818, Actor Loss: -35.343642234802246
Episode 324: Time: 0.03513741493225098, Total Reward: 25.81062401913063, Q Loss: 9.680203080177307, Actor Loss: -35.20221996307373
Episode 325: Time: 0.0347139835357666, Total Reward: 25.432514689826807, Q Loss: 6.731522738933563, Actor Loss: -35.82943820953369
Episode 326: Time: 0.04323840141296387, Total Reward: 35.31604819183013, Q Loss: 8.143921434879303, Actor Loss: -43.19246578216553
Episode 327: Time: 0.03462386131286621, Total Reward: 26.011311598026584, Q Loss: 6.940910696983337, Actor Loss: -35.79671382904053
Episode 328: Time: 0.052057743072509766, Total Reward: 44.197280574748326, Q Loss: 11.753242671489716, Actor Loss: -51.913968086242676
Episode 329: Time: 0.034667253494262695, Total Reward: 25.91096218054443, Q Loss: 5.780442833900452, Actor Loss: -37.99969959259033
Episode 330: Time: 0.07756495475769043, Total Reward: 72.5616724634263, Q Loss: 19.29875934123993, Actor Loss: -79.45434236526489
Episode 331: Time: 0.0512766838073730, Total Reward: 44.44461561261023, Q Loss: 15.883175611495972, Actor Loss: -50.31663942337036
Episode 332: Time: 0.059566497802734375, Total Reward: 53.910809164730544, Q Loss: 18.8722984790802, Actor Loss: -63.41877222061157

Episode 333: Time: 0.06788158416748047, Total Reward: 63.390631758386164, Q Loss: 20.474043488502502, Actor Loss: -74.58643627166748
Episode 334: Time: 0.05966019630432129, Total Reward: 54.406290582498286, Q Loss: 21.45083773136139, Actor Loss: -67.70715427398682
Episode 335: Time: 0.04246068000793457, Total Reward: 35.58914298777534, Q Loss: 12.426395177841187, Actor Loss: -45.92664337158203
Episode 336: Time: 0.0340886116027832, Total Reward: 26.031335946210973, Q Loss: 8.522900342941284, Actor Loss: -36.49535369873047
Episode 337: Time: 0.033997535705566406, Total Reward: 26.19731777610017, Q Loss: 8.578558921813965, Actor Loss: -36.270358085632324
Episode 338: Time: 0.034056663513183594, Total Reward: 26.277294287786237, Q Loss: 8.807268857955933, Actor Loss: -36.51308059692383
Episode 339: Time: 0.034021615982055664, Total Reward: 25.58608458322343, Q Loss: 10.110463857650757, Actor Loss: -37.83266639709473
Episode 340: Time: 0.04277181625366211, Total Reward: 35.09285066836525, Q Loss: 7.880388498306274, Actor Loss: -43.21928310394287
Episode 341: Time: 0.034287452697753906, Total Reward: 25.447739531643272, Q Loss: 8.906920075416565, Actor Loss: -38.42466449737549
Episode 342: Time: 0.03415966033935547, Total Reward: 25.97679071179544, Q Loss: 11.123488187789917, Actor Loss: -38.37512016296387
Episode 343: Time: 0.03493690490722656, Total Reward: 25.20179961709367, Q Loss: 11.172067165374756, Actor Loss: -37.971909523010254
Episode 344: Time: 0.035223960876464844, Total Reward: 25.55857010042968, Q Loss: 9.326961159706116, Actor Loss: -36.1661262512207
Episode 345: Time: 0.04308891296386719, Total Reward: 34.79502388895538, Q Loss: 14.10961663722992, Actor Loss: -50.96288013458252
Episode 346: Time: 0.03469109535217285, Total Reward: 26.285434847369842, Q Loss: 14.891061902046204, Actor Loss: -33.340245723724365
Episode 347: Time: 0.03419184684753418, Total Reward: 25.274003330633242, Q Loss: 11.072897911071777, Actor Loss: -37.219764709472656
Episode 348: Time: 0.03414154052734375, Total Reward: 26.007539731029453, Q Loss: 11.669294118881226, Actor Loss: -39.96425437927246
Episode 349: Time: 0.034157514572143555, Total Reward: 25.465403035099484, Q Loss: 10.069263577461243, Actor Loss: -34.81008815765381
Episode 350: Time: 0.03412437438964844, Total Reward: 25.24148375184895, Q Loss: 8.589634895324707, Actor Loss: -37.90834712982178
Episode 351: Time: 0.03406977653503418, Total Reward: 25.88218989012712, Q Loss: 8.760207772254944, Actor Loss: -39.416687965393066
Episode 352: Time: 0.034567832946777344, Total Reward: 25.312136729156567, Q Loss: 7.035628318786621, Actor Loss: -37.04564094543457
Episode 353: Time: 0.03413224220275879, Total Reward: 25.328173364379712, Q Loss: 8.679944276809692, Actor Loss: -39.972856521606445
Episode 354: Time: 0.034114837646484375, Total Reward: 25.722758556905017, Q Loss: 9.171682596206665, Actor Loss: -36.44236612319946
Episode 355: Time: 0.03419780731201172, Total Reward: 25.576762156459296, Q Loss: 9.800812125205994, Actor Loss: -38.39419937133789
Episode 356: Time: 0.03412818908691406, Total Reward: 25.885384438457237, Q Loss: 8.15643835067749, Actor Loss: -35.10152578353882
Episode 357: Time: 0.025647640228271484, Total Reward: 16.923212092007711, Q Loss: 7.182684421539307, Actor Loss: -28.542163848876953
Episode 358: Time: 0.03404736518859863, Total Reward: 25.670312826461327, Q Loss: 6.818429470062256, Actor Loss: -41.25902080535889
Episode 359: Time: 0.034532785415649414, Total Reward: 25.7073123329818, Q Loss: 7.177506327629089, Actor Loss: -37.6089391708374
Episode 360: Time: 0.025844097137451172, Total Reward: 16.948196345514564, Q Loss: 3.175921618938446, Actor Loss: -31.177959442138672

Episode 361: Time: 0.03402590751647949, Total Reward: 25.345231323695707, Q Loss: 10.520193576812744, Actor Loss: -38.808627128601074
Episode 362: Time: 0.0341792106628418, Total Reward: 25.78911639483484, Q Loss: 7.607376277446747, Actor Loss: -39.3904504776001
Episode 363: Time: 0.03405022621154785, Total Reward: 25.519908640479102, Q Loss: 6.810134530067444, Actor Loss: -38.066731452941895
Episode 364: Time: 0.02584385871887207, Total Reward: 16.8771373440672, Q Loss: 4.120824098587036, Actor Loss: -30.423107147216797
Episode 365: Time: 0.03401541709899902, Total Reward: 26.25766423702393, Q Loss: 7.920699119567871, Actor Loss: -40.61940288543701
Episode 366: Time: 0.04304766654968262, Total Reward: 35.38566179428082, Q Loss: 9.653994500637054, Actor Loss: -50.81106662750244
Episode 367: Time: 0.034296512603759766, Total Reward: 25.455647528956842, Q Loss: 9.106979191303253, Actor Loss: -38.73110771179199
Episode 368: Time: 0.034050941467285156, Total Reward: 25.374947302586506, Q Loss: 9.991965293884277, Actor Loss: -39.64387226104736
Episode 369: Time: 0.03432297706604004, Total Reward: 25.672204971726934, Q Loss: 6.634990692138672, Actor Loss: -36.69822978973389
Episode 370: Time: 0.03641653060913086, Total Reward: 25.157377799661933, Q Loss: 9.18449205160141, Actor Loss: -35.48086738586426
Episode 371: Time: 0.036359548568725586, Total Reward: 26.009674252226127, Q Loss: 10.949984192848206, Actor Loss: -37.46765327453613
Episode 372: Time: 0.035651445388793945, Total Reward: 25.767627618210803, Q Loss: 7.635599255561829, Actor Loss: -40.53074836730957
Episode 373: Time: 0.02607870101928711, Total Reward: 16.980239621217493, Q Loss: 7.021543025970459, Actor Loss: -29.69046688079834
Episode 374: Time: 0.03442716598510742, Total Reward: 25.840084542161833, Q Loss: 8.684034824371338, Actor Loss: -36.66985034942627
Episode 375: Time: 0.034380435943603516, Total Reward: 25.094264792185637, Q Loss: 8.515049695968628, Actor Loss: -37.22743511199951
Episode 376: Time: 0.025888681411743164, Total Reward: 16.95703775283345, Q Loss: 6.684069037437439, Actor Loss: -29.377609252929688
Episode 377: Time: 0.034285306930054199, Total Reward: 25.213149887521812, Q Loss: 5.605511426925659, Actor Loss: -38.45786190032959
Episode 378: Time: 0.03430986404418945, Total Reward: 25.77939942440135, Q Loss: 9.92136287689209, Actor Loss: -41.07244300842285
Episode 379: Time: 0.035064697265625, Total Reward: 25.261824053314694, Q Loss: 6.497018098831177, Actor Loss: -38.36024856567383
Episode 380: Time: 0.0259096622467041, Total Reward: 16.964946810963397, Q Loss: 6.8752952218055725, Actor Loss: -31.09905433654785
Episode 381: Time: 0.025727272033691406, Total Reward: 16.82601249557585, Q Loss: 8.177251100540161, Actor Loss: -31.965468406677246
Episode 382: Time: 0.034158945083618164, Total Reward: 25.71907315326221, Q Loss: 7.210347890853882, Actor Loss: -37.35664176940918
Episode 383: Time: 0.025930404663085938, Total Reward: 16.91640607273269, Q Loss: 4.190881013870239, Actor Loss: -31.23372745513916
Episode 384: Time: 0.034342050552368164, Total Reward: 25.904833023404578, Q Loss: 10.572244048118591, Actor Loss: -37.23748207092285
Episode 385: Time: 0.034264326095581055, Total Reward: 25.212290386502502, Q Loss: 10.153839468955994, Actor Loss: -36.80543041229248
Episode 386: Time: 0.02624225616455078, Total Reward: 16.92699781894138, Q Loss: 6.037623882293701, Actor Loss: -29.592554092407227
Episode 387: Time: 0.025789976119995117, Total Reward: 16.970584881907005, Q Loss: 8.337399959564209, Actor Loss: -27.37357807159424
Episode 388: Time: 0.034072160720825195, Total Reward: 25.66680511005402, Q Loss: 6.070255875587463, Actor Loss: -41.677024841308594

Episode 389: Time: 0.034035682678222656, Total Reward: 25.654299706201712, Q Loss: 9.768625259399414, Actor Loss: -34.54223823547363
Episode 390: Time: 0.03404521942138672, Total Reward: 25.33728027315871, Q Loss: 7.659233331680298, Actor Loss: -38.3399600982666
Episode 391: Time: 0.034024715423583984, Total Reward: 25.327346715078818, Q Loss: 7.618537187576294, Actor Loss: -41.945011138916016
Episode 392: Time: 0.034134864807128906, Total Reward: 25.337663407508543, Q Loss: 5.3951791524887085, Actor Loss: -41.333542823791504
Episode 393: Time: 0.034728050231933594, Total Reward: 26.07245255099296, Q Loss: 8.13014966249466, Actor Loss: -38.374019622802734
Episode 394: Time: 0.034183502197265625, Total Reward: 25.81745322282869, Q Loss: 6.996015250682831, Actor Loss: -42.668612480163574
Episode 395: Time: 0.025656700134277344, Total Reward: 16.958922575184427, Q Loss: 4.422672748565674, Actor Loss: -31.124740600585938
Episode 396: Time: 0.03411078453063965, Total Reward: 25.448857397583694, Q Loss: 6.945764660835266, Actor Loss: -39.08226013183594
Episode 397: Time: 0.034088134765625, Total Reward: 25.703085016507522, Q Loss: 8.666216850280762, Actor Loss: -38.22711658477783
Episode 398: Time: 0.025652170181274414, Total Reward: 16.98396801410161, Q Loss: 6.795129776000977, Actor Loss: -28.3899564743042
Episode 399: Time: 0.034223318099975586, Total Reward: 25.760391644559913, Q Loss: 6.725059390068054, Actor Loss: -36.51314926147461
Validation Mean: 21.407440124558537, Validation Std: 4.169615399367413
saving model
Episode 400: Time: 0.02583909034729004, Total Reward: 16.894354608813803, Q Loss: 6.487549066543579, Actor Loss: -27.717381477355957
Episode 401: Time: 0.033883094787597656, Total Reward: 25.449147158564017, Q Loss: 8.557750821113586, Actor Loss: -38.8792667388916
Episode 402: Time: 0.0341334342956543, Total Reward: 25.304287859495833, Q Loss: 8.405110716819763, Actor Loss: -40.889153480529785
Episode 403: Time: 0.025756359100341797, Total Reward: 16.96472855653539, Q Loss: 6.055651903152466, Actor Loss: -28.644402503967285
Episode 404: Time: 0.03427219390869406, Total Reward: 25.966610624096436, Q Loss: 8.297262132167816, Actor Loss: -38.26065635681152
Episode 405: Time: 0.03410816192626953, Total Reward: 25.8776556722352, Q Loss: 11.600142478942871, Actor Loss: -40.84059524536133
Episode 406: Time: 0.035208702087402344, Total Reward: 25.571232883206612, Q Loss: 6.330810308456421, Actor Loss: -39.706671714782715
Episode 407: Time: 0.03415226936340332, Total Reward: 26.364827792760458, Q Loss: 9.040574193000793, Actor Loss: -40.23962211608887
Episode 408: Time: 0.03423571586608887, Total Reward: 25.182183927243514, Q Loss: 9.131306648254395, Actor Loss: -38.51457118988037
Episode 409: Time: 0.034064531326293945, Total Reward: 25.73631629130773, Q Loss: 9.302630305290222, Actor Loss: -39.50519275665283
Episode 410: Time: 0.025609254837036133, Total Reward: 16.915782156094473, Q Loss: 8.579297184944153, Actor Loss: -25.60906219482422
Episode 411: Time: 0.03412652015686035, Total Reward: 25.92055501052847, Q Loss: 9.301005959510803, Actor Loss: -36.79275989532471
Episode 412: Time: 0.03405141830444336, Total Reward: 25.882599971515393, Q Loss: 12.037982821464539, Actor Loss: -40.177741050720215
Episode 413: Time: 0.034397125244140625, Total Reward: 25.26066648893404, Q Loss: 10.698344230651855, Actor Loss: -37.13565540313721
Episode 414: Time: 0.03404831886291504, Total Reward: 26.01487504138411, Q Loss: 7.009599685668945, Actor Loss: -42.198102951049805
Episode 415: Time: 0.03416776657104492, Total Reward: 25.251925476926193, Q Loss: 8.02557361125946, Actor Loss: -36.970155571594238

Episode 416: Time: 0.0257418155670166, Total Reward: 16.91397620181396, Q Loss: 6.110088109970093, Actor Loss: -28.350131034851074
Episode 417: Time: 0.033975839614868164, Total Reward: 25.439149341279403, Q Loss: 8.368476748466492, Actor Loss: -35.23045825958252
Episode 418: Time: 0.033963680267333984, Total Reward: 25.245309376771196, Q Loss: 10.63771677017212, Actor Loss: -41.6012020111084
Episode 419: Time: 0.034102439880371094, Total Reward: 26.026942668136005, Q Loss: 10.60970675945282, Actor Loss: -40.79884910583496
Episode 420: Time: 0.03462386131286621, Total Reward: 25.486332182759288, Q Loss: 9.759625434875488, Actor Loss: -40.56952953338623
Episode 421: Time: 0.03422045707702637, Total Reward: 25.89601754549427, Q Loss: 12.319785594940186, Actor Loss: -39.605366706848145
Episode 422: Time: 0.03410601615905762, Total Reward: 25.968508814686647, Q Loss: 7.209006905555725, Actor Loss: -38.182044982910156
Episode 423: Time: 0.034055471420288086, Total Reward: 25.124489279538967, Q Loss: 9.859238266944885, Actor Loss: -38.76700782775879
Episode 424: Time: 0.03394293785095215, Total Reward: 25.277002523019384, Q Loss: 12.022121667861938, Actor Loss: -39.89203071594238
Episode 425: Time: 0.025746583938598633, Total Reward: 16.91013331644961, Q Loss: 6.494349956512451, Actor Loss: -27.289273262023926
Episode 426: Time: 0.03403759002685547, Total Reward: 25.496664422836538, Q Loss: 7.699324071407318, Actor Loss: -43.855899810791016
Episode 427: Time: 0.03474593162536621, Total Reward: 25.506611758442574, Q Loss: 7.170832872390747, Actor Loss: -38.68317985534668
Episode 428: Time: 0.0260617733001709, Total Reward: 16.834350203740968, Q Loss: 7.282209515571594, Actor Loss: -26.86931037902832
Episode 429: Time: 0.025667190551757812, Total Reward: 16.938232300675946, Q Loss: 6.699949502944946, Actor Loss: -29.589640617370605
Episode 430: Time: 0.03397345542907715, Total Reward: 25.298023405688244, Q Loss: 8.867610216140747, Actor Loss: -38.68312358856201
Episode 431: Time: 0.03404426574707031, Total Reward: 25.409560892139904, Q Loss: 9.721184730529785, Actor Loss: -40.37528133392334
Episode 432: Time: 0.025682449340820312, Total Reward: 16.781265611036837, Q Loss: 5.712781310081482, Actor Loss: -29.19241428375244
Episode 433: Time: 0.03397250175476074, Total Reward: 25.528586990659484, Q Loss: 10.55880880355835, Actor Loss: -34.40529727935791
Episode 434: Time: 0.034330129623413086, Total Reward: 25.372672608166177, Q Loss: 6.660829782485962, Actor Loss: -39.377763748168945
Episode 435: Time: 0.0342411994934082, Total Reward: 26.027892574157327, Q Loss: 11.037158966064453, Actor Loss: -41.63821887969971
Episode 436: Time: 0.03414297103881836, Total Reward: 26.127755084963315, Q Loss: 8.684404015541077, Actor Loss: -39.65903663635254
Episode 437: Time: 0.03404402732849121, Total Reward: 25.35720561143646, Q Loss: 9.241812229156494, Actor Loss: -39.4191837310791
Episode 438: Time: 0.025887727737426758, Total Reward: 16.863620304723735, Q Loss: 5.079651355743408, Actor Loss: -29.664758682250977
Episode 439: Time: 0.034218549728393555, Total Reward: 25.426271552601868, Q Loss: 7.083411335945129, Actor Loss: -38.02590465545654
Episode 440: Time: 0.03419351577758789, Total Reward: 25.31108677408968, Q Loss: 6.976312875747681, Actor Loss: -41.24054145812988
Episode 441: Time: 0.026193857192993164, Total Reward: 16.829118312936018, Q Loss: 6.695930361747742, Actor Loss: -28.598048210144043
Episode 442: Time: 0.03442692756652832, Total Reward: 25.26286713760536, Q Loss: 7.037878751754761, Actor Loss: -40.4545841217041
Episode 443: Time: 0.03419089317321777, Total Reward: 25.202227578320972, Q Loss: 7.341792702674866, Actor Loss: -41.10062026977539

Episode 444: Time: 0.03418850898742676, Total Reward: 25.59196292183235, Q Loss: 8.90824806690216, Actor Loss: -43.087416648864746
Episode 445: Time: 0.03414511680603027, Total Reward: 25.342742723722242, Q Loss: 9.262656211853027, Actor Loss: -39.22347450256348
Episode 446: Time: 0.02568197250366211, Total Reward: 16.887070778672474, Q Loss: 6.27463960647583, Actor Loss: -31.670412063598633
Episode 447: Time: 0.03427886962890625, Total Reward: 26.05317844912899, Q Loss: 9.835563063621521, Actor Loss: -43.919843673706055
Episode 448: Time: 0.026157140731811523, Total Reward: 16.923499369014774, Q Loss: 6.550999879837036, Actor Loss: -28.772982597351074
Episode 449: Time: 0.03418731689453125, Total Reward: 25.447749099495994, Q Loss: 10.428085803985596, Actor Loss: -39.410118103027344
Episode 450: Time: 0.03428149223327637, Total Reward: 25.88198634038124, Q Loss: 9.114922642707825, Actor Loss: -42.52570152282715
Episode 451: Time: 0.03429722785949707, Total Reward: 25.218449549182942, Q Loss: 8.03973126411438, Actor Loss: -39.3508825302124
Episode 452: Time: 0.025887727737426758, Total Reward: 16.88873640148975, Q Loss: 5.506997585296631, Actor Loss: -31.54660987854004
Episode 453: Time: 0.025765657424926758, Total Reward: 16.953200930936845, Q Loss: 6.914635181427002, Actor Loss: -31.065261840820312
Episode 454: Time: 0.03436422348022461, Total Reward: 25.61332340084826, Q Loss: 9.267029762268066, Actor Loss: -39.596543312072754
Episode 455: Time: 0.03470039367675781, Total Reward: 25.372838897901897, Q Loss: 9.549888849258423, Actor Loss: -40.6640043258667
Episode 456: Time: 0.03425908088684082, Total Reward: 25.46055037414767, Q Loss: 7.781808376312256, Actor Loss: -41.08168888092041
Episode 457: Time: 0.03428316116333008, Total Reward: 25.354620737921202, Q Loss: 7.989349603652954, Actor Loss: -43.6175479888916
Episode 458: Time: 0.025769472122192383, Total Reward: 16.906771404877478, Q Loss: 6.711646556854248, Actor Loss: -30.639445304870605
Episode 459: Time: 0.02567601203918457, Total Reward: 16.960140213832528, Q Loss: 3.9941829442977905, Actor Loss: -28.71678352355957
Episode 460: Time: 0.03432965278625488, Total Reward: 25.185121660894232, Q Loss: 8.952349424362183, Actor Loss: -41.5742130279541
Episode 461: Time: 0.03422403335571289, Total Reward: 25.98652738984689, Q Loss: 10.729239702224731, Actor Loss: -38.39354944229126
Episode 462: Time: 0.026259183883666992, Total Reward: 16.992837453264265, Q Loss: 9.463829517364502, Actor Loss: -28.809537887573242
Episode 463: Time: 0.03422951698303223, Total Reward: 25.436738521035775, Q Loss: 6.725954055786133, Actor Loss: -45.798580169677734
Episode 464: Time: 0.03416919708251953, Total Reward: 25.312471894990612, Q Loss: 11.519675135612488, Actor Loss: -36.989654541015625
Episode 465: Time: 0.03417253494262695, Total Reward: 25.882863766996664, Q Loss: 8.524625897407532, Actor Loss: -40.48280715942383
Episode 466: Time: 0.0258023738861084, Total Reward: 16.966789211680528, Q Loss: 6.50848126411438, Actor Loss: -31.965996742248535
Episode 467: Time: 0.034357547760009766, Total Reward: 25.87629688895082, Q Loss: 7.109376549720764, Actor Loss: -41.136850357055664
Episode 468: Time: 0.02579188346862793, Total Reward: 16.840860280847338, Q Loss: 5.949895858764648, Actor Loss: -31.3494873046875
Episode 469: Time: 0.034677982330322266, Total Reward: 25.921627730457313, Q Loss: 8.569975137710571, Actor Loss: -40.11297798156738
Episode 470: Time: 0.02572464942932129, Total Reward: 16.922598558290947, Q Loss: 6.568244457244873, Actor Loss: -30.625882148742676
Episode 471: Time: 0.025955677032470703, Total Reward: 16.80344393109814, Q Loss: 6.94573301076889, Actor Loss: -31.687203407287598

Episode 472: Time: 0.034430742263793945, Total Reward: 25.526160922252686, Q Loss: 8.973917484283447, Actor Loss: -46.222639083862305
Episode 473: Time: 0.025777578353881836, Total Reward: 16.912443293664285, Q Loss: 3.886745870113373, Actor Loss: -32.99653911590576
Episode 474: Time: 0.03436684608459473, Total Reward: 25.955308786638167, Q Loss: 9.706301927566528, Actor Loss: -40.03344249725342
Episode 475: Time: 0.03449654579162598, Total Reward: 25.576481306624345, Q Loss: 6.795933961868286, Actor Loss: -40.56998157501221
Episode 476: Time: 0.0263516902923584, Total Reward: 16.876150211108175, Q Loss: 6.089974641799927, Actor Loss: -31.020992279052734
Episode 477: Time: 0.025945425033569336, Total Reward: 16.883110079303368, Q Loss: 6.004157543182373, Actor Loss: -30.545631408691406
Episode 478: Time: 0.03429102897644043, Total Reward: 26.226549093465536, Q Loss: 7.721912622451782, Actor Loss: -42.61764717102051
Episode 479: Time: 0.025934457778930664, Total Reward: 16.881483663076256, Q Loss: 5.918442010879517, Actor Loss: -31.768333435058594
Episode 480: Time: 0.025922298431396484, Total Reward: 16.930918983990193, Q Loss: 6.835724115371704, Actor Loss: -28.641050338745117
Episode 481: Time: 0.034404754638671875, Total Reward: 25.651832176719676, Q Loss: 8.540326714515686, Actor Loss: -41.871070861816406
Episode 482: Time: 0.025906801223754883, Total Reward: 16.938616802784647, Q Loss: 7.353519439697266, Actor Loss: -30.53922939300537
Episode 483: Time: 0.034885406494140625, Total Reward: 25.924460937980452, Q Loss: 6.672338962554932, Actor Loss: -44.36341381072998
Episode 484: Time: 0.035008907318115234, Total Reward: 25.31087089206229, Q Loss: 10.82345175743103, Actor Loss: -39.97053337097168
Episode 485: Time: 0.03460049629211426, Total Reward: 25.702594418285027, Q Loss: 6.581080496311188, Actor Loss: -40.85870170593262
Episode 486: Time: 0.03457188606262207, Total Reward: 25.312489571607728, Q Loss: 8.862428903579712, Actor Loss: -40.814735412597656
Episode 487: Time: 0.03460979461669922, Total Reward: 25.321601108533006, Q Loss: 9.630103349685669, Actor Loss: -42.69848442077637
Episode 488: Time: 0.034697532653808594, Total Reward: 25.82661309730694, Q Loss: 9.991594433784485, Actor Loss: -41.460564613342285
Episode 489: Time: 0.02667093276977539, Total Reward: 16.886678240169736, Q Loss: 5.591100335121155, Actor Loss: -30.680200576782227
Episode 490: Time: 0.03476834297180176, Total Reward: 25.83514233322026, Q Loss: 7.0660600066185, Actor Loss: -44.10983753204346
Episode 491: Time: 0.034690141677856445, Total Reward: 25.50181512185072, Q Loss: 11.24465787410736, Actor Loss: -41.88689613342285
Episode 492: Time: 0.034780025482177734, Total Reward: 25.572408252135254, Q Loss: 7.5235337018966675, Actor Loss: -39.89654541015625
Episode 493: Time: 0.026024341583251953, Total Reward: 16.933461636739764, Q Loss: 6.563156604766846, Actor Loss: -30.485034942626953
Episode 494: Time: 0.03461647033691406, Total Reward: 25.27128382005468, Q Loss: 9.49560832977295, Actor Loss: -40.9802770614624
Episode 495: Time: 0.03514504432678223, Total Reward: 25.34652416806575, Q Loss: 8.936148047447205, Actor Loss: -43.794410705566406
Episode 496: Time: 0.026025772094726562, Total Reward: 16.952157834428814, Q Loss: 9.207205533981323, Actor Loss: -30.798049926757812
Episode 497: Time: 0.03464102745056152, Total Reward: 25.35775353384156, Q Loss: 8.194300055503845, Actor Loss: -37.94757080078125
Episode 498: Time: 0.034752607345581055, Total Reward: 25.795713691784563, Q Loss: 10.891366958618164, Actor Loss: -43.878533363342285
Episode 499: Time: 0.034768104553222656, Total Reward: 25.624957079600083, Q Loss: 7.311329007148743, Actor Loss: -39.55037498474121

Validation Mean: 21.069211333165555, Validation Std: 4.176934801936718
saving model
Episode 500: Time: 0.03501534461975098, Total Reward: 25.74959835926567, Q Loss: 9.267725944519043, Actor Loss: -39.65199661254883
Episode 501: Time: 0.02618408203125, Total Reward: 16.94404115093196, Q Loss: 4.658997595310211, Actor Loss: -31.330745697021484
Episode 502: Time: 0.034986019134521484, Total Reward: 25.29283567885057, Q Loss: 7.781566619873047, Actor Loss: -38.78301525115967
Episode 503: Time: 0.035175323486328125, Total Reward: 25.175392654647194, Q Loss: 6.887319564819336, Actor Loss: -41.510069847106934
Episode 504: Time: 0.03477644920349121, Total Reward: 25.793519290782935, Q Loss: 8.261745572090149, Actor Loss: -38.88632774353027
Episode 505: Time: 0.03565168380737305, Total Reward: 25.297229343061968, Q Loss: 7.742496967315674, Actor Loss: -41.612135887145996
Episode 506: Time: 0.02644658088684082, Total Reward: 16.978353553928947, Q Loss: 4.868670403957367, Actor Loss: -32.78163146972656
Episode 507: Time: 0.034978389739990234, Total Reward: 25.235681303012235, Q Loss: 10.916274070739746, Actor Loss: -40.16631889343262
Episode 508: Time: 0.03492164611816406, Total Reward: 25.238620542301852, Q Loss: 8.66465425491333, Actor Loss: -41.433549880981445
Episode 509: Time: 0.035047292709350586, Total Reward: 25.78474203048614, Q Loss: 5.9919353723526, Actor Loss: -42.00783729553223
Episode 510: Time: 0.035106658935546875, Total Reward: 25.195737671801222, Q Loss: 8.134372472763062, Actor Loss: -44.58209419250488
Episode 511: Time: 0.04405331611633301, Total Reward: 35.09858078560645, Q Loss: 8.485462188720703, Actor Loss: -52.39578437805176
Episode 512: Time: 0.034991500276184082, Total Reward: 25.338452676087954, Q Loss: 7.269052743911743, Actor Loss: -40.51494789123535
Episode 513: Time: 0.02638530731201172, Total Reward: 16.85861286212699, Q Loss: 7.154229402542114, Actor Loss: -32.773972511291504
Episode 514: Time: 0.035102128982543945, Total Reward: 25.20748442856521, Q Loss: 7.26760196685791, Actor Loss: -44.18904495239258
Episode 515: Time: 0.03492331504821777, Total Reward: 25.13455842154883, Q Loss: 7.551034450531006, Actor Loss: -45.21622180938721
Episode 516: Time: 0.026360511779785156, Total Reward: 16.91578305959402, Q Loss: 7.118406534194946, Actor Loss: -29.711573600769043
Episode 517: Time: 0.034998178482055664, Total Reward: 25.59016160621164, Q Loss: 8.887021899223328, Actor Loss: -43.65469264984131
Episode 518: Time: 0.02652454376220703, Total Reward: 17.017031586085164, Q Loss: 7.994766712188721, Actor Loss: -34.75771141052246
Episode 519: Time: 0.026386022567749023, Total Reward: 16.95569011631226, Q Loss: 7.317377924919128, Actor Loss: -29.99903106689453
Episode 520: Time: 0.03501248359680176, Total Reward: 26.165052396311946, Q Loss: 7.250292658805847, Actor Loss: -40.68100547790527
Episode 521: Time: 0.02645254135131836, Total Reward: 16.930500974015327, Q Loss: 4.638119578361511, Actor Loss: -30.197935104370117
Episode 522: Time: 0.03510117530822754, Total Reward: 25.590318913023644, Q Loss: 7.537378549575806, Actor Loss: -43.111693382263184
Episode 523: Time: 0.02638554573059082, Total Reward: 16.947007588015495, Q Loss: 6.136107087135315, Actor Loss: -29.44015121459961
Episode 524: Time: 0.026408672332763672, Total Reward: 16.889352176258093, Q Loss: 6.118910789489746, Actor Loss: -33.474345207214355
Episode 525: Time: 0.026523351669311523, Total Reward: 16.875442174347757, Q Loss: 6.053471088409424, Actor Loss: -36.507596015930176
Episode 526: Time: 0.03519725799560547, Total Reward: 25.664740515715465, Q Loss: 10.119650840759277, Actor Loss: -37.80529022216797

Episode 527: Time: 0.03503298759460449, Total Reward: 25.606046697513754, Q Loss: 9.072903394699097, Actor Loss: -40.51127910614014
Episode 528: Time: 0.034966468811035156, Total Reward: 25.31321956332764, Q Loss: 8.809552073478699, Actor Loss: -44.55332279205322
Episode 529: Time: 0.0351262092590332, Total Reward: 25.36775952927642, Q Loss: 8.94643348455429, Actor Loss: -38.887542724609375
Episode 530: Time: 0.03499722480773926, Total Reward: 25.273980319924625, Q Loss: 7.480915546417236, Actor Loss: -42.36451435089111
Episode 531: Time: 0.03528118133544922, Total Reward: 25.396178996139206, Q Loss: 5.552490592002869, Actor Loss: -40.6335334777832
Episode 532: Time: 0.02637457847595215, Total Reward: 16.821494131825435, Q Loss: 7.565202832221985, Actor Loss: -30.278518676757812
Episode 533: Time: 0.026414155960083008, Total Reward: 16.919914100013123, Q Loss: 5.875399589538574, Actor Loss: -32.499892234802246
Episode 534: Time: 0.026350975036621094, Total Reward: 16.79107420948644, Q Loss: 6.381165027618408, Actor Loss: -29.780298233032227
Episode 535: Time: 0.034838199615478516, Total Reward: 25.40705793380774, Q Loss: 8.807758092880249, Actor Loss: -44.025696754455566
Episode 536: Time: 0.026691198348999023, Total Reward: 16.947373339018526, Q Loss: 6.693948984146118, Actor Loss: -34.18787097930908
Episode 537: Time: 0.034934043884277344, Total Reward: 25.914086923354798, Q Loss: 5.804976403713226, Actor Loss: -40.76238250732422
Episode 538: Time: 0.0352475643157959, Total Reward: 25.548586871729277, Q Loss: 8.251217365264893, Actor Loss: -41.76871299743652
Episode 539: Time: 0.034931182861328125, Total Reward: 25.710227288551284, Q Loss: 7.220776319503784, Actor Loss: -38.748443603515625
Episode 540: Time: 0.026308298110961914, Total Reward: 16.940593873243298, Q Loss: 7.7340476512908936, Actor Loss: -29.61444854736328
Episode 541: Time: 0.03496050834655762, Total Reward: 25.414021238951623, Q Loss: 8.060961842536926, Actor Loss: -39.792070388793945
Episode 542: Time: 0.026339054107666016, Total Reward: 16.9354338503572, Q Loss: 7.715837478637695, Actor Loss: -33.11460876464844
Episode 543: Time: 0.03498077392578125, Total Reward: 25.63550033757646, Q Loss: 11.1662837266922, Actor Loss: -43.062424659729004
Episode 544: Time: 0.026201486587524414, Total Reward: 16.96725408431633, Q Loss: 6.924945592880249, Actor Loss: -33.398799896240234
Episode 545: Time: 0.035271644592285156, Total Reward: 25.536693547007626, Q Loss: 12.54262375831604, Actor Loss: -39.561527252197266
Episode 546: Time: 0.03496217727661133, Total Reward: 25.7169551964158, Q Loss: 11.854631900787354, Actor Loss: -41.7657527923584
Episode 547: Time: 0.034806013107299805, Total Reward: 25.325293374822405, Q Loss: 12.89950156211853, Actor Loss: -42.99488925933838
Episode 548: Time: 0.034924983978271484, Total Reward: 25.521640624143032, Q Loss: 9.373335838317871, Actor Loss: -38.030540466308594
Episode 549: Time: 0.026146888732910156, Total Reward: 16.960040407539076, Q Loss: 11.994691610336304, Actor Loss: -30.883983612060547
Episode 550: Time: 0.026056289672851562, Total Reward: 16.929550308792503, Q Loss: 7.860295653343201, Actor Loss: -29.85389804840088
Episode 551: Time: 0.026186466217041016, Total Reward: 16.822026617198333, Q Loss: 7.718515992164612, Actor Loss: -34.56163311004639
Episode 552: Time: 0.03497600555419922, Total Reward: 25.38322632598471, Q Loss: 8.685990452766418, Actor Loss: -44.46009349822998
Episode 553: Time: 0.026052474975585938, Total Reward: 16.932994458514564, Q Loss: 8.511016845703125, Actor Loss: -31.5526762008667
Episode 554: Time: 0.0345911979675293, Total Reward: 25.622261310340157, Q Loss: 9.63344693183899, Actor Loss: -43.89906406402588

Episode 555: Time: 0.026017189025878906, Total Reward: 16.898292338341427, Q Loss: 7.113225340843201, Actor Loss: -29.36915683746338
Episode 556: Time: 0.03468894958496094, Total Reward: 25.524038064872403, Q Loss: 9.427290201187134, Actor Loss: -42.86996555328369
Episode 557: Time: 0.034575700759887695, Total Reward: 25.977293802317416, Q Loss: 6.719281435012817, Actor Loss: -44.10562801361084
Episode 558: Time: 0.02598404884338379, Total Reward: 16.873599422471557, Q Loss: 5.17400598526001, Actor Loss: -29.075847625732422
Episode 559: Time: 0.03510594367980957, Total Reward: 25.224285661319648, Q Loss: 9.310725450515747, Actor Loss: -39.04372024536133
Episode 560: Time: 0.034532785415649414, Total Reward: 25.85053630779737, Q Loss: 10.602324962615967, Actor Loss: -45.894174575805664
Episode 561: Time: 0.034735679626464844, Total Reward: 25.350840305090617, Q Loss: 11.695056796073914, Actor Loss: -40.84300470352173
Episode 562: Time: 0.034581661224365234, Total Reward: 25.232992841988644, Q Loss: 11.109652280807495, Actor Loss: -45.23918342590332
Episode 563: Time: 0.026073455810546875, Total Reward: 16.79197919737087, Q Loss: 8.7709299325943, Actor Loss: -32.91588115692139
Episode 564: Time: 0.034703731536865234, Total Reward: 25.775010658482596, Q Loss: 12.631844878196716, Actor Loss: -42.536550521850586
Episode 565: Time: 0.02606058120727539, Total Reward: 16.9358835882005, Q Loss: 8.63819408416748, Actor Loss: -31.360309600830078
Episode 566: Time: 0.0295412540435791, Total Reward: 16.857822397817774, Q Loss: 9.527956247329712, Actor Loss: -30.60944938659668
Episode 567: Time: 0.03480172157287598, Total Reward: 25.162885684035892, Q Loss: 10.358294129371643, Actor Loss: -42.169426918029785
Episode 568: Time: 0.034882307052612305, Total Reward: 25.488369637197298, Q Loss: 9.207938194274902, Actor Loss: -40.64962673187256
Episode 569: Time: 0.03521370887756348, Total Reward: 25.934929322486834, Q Loss: 10.34316337108612, Actor Loss: -43.76282024383545
Episode 570: Time: 0.03469729423522949, Total Reward: 25.557158426906252, Q Loss: 7.5347431898117065, Actor Loss: -38.55254650115967
Episode 571: Time: 0.026110172271728516, Total Reward: 16.797875987170414, Q Loss: 8.788986444473267, Actor Loss: -32.84955406188965
Episode 572: Time: 0.03520083427429199, Total Reward: 25.426675794038132, Q Loss: 11.708491086959839, Actor Loss: -39.46345806121826
Episode 573: Time: 0.03480243682861328, Total Reward: 25.436973459946632, Q Loss: 8.756163358688354, Actor Loss: -42.73851776123047
Episode 574: Time: 0.026161909103393555, Total Reward: 16.86662890501794, Q Loss: 8.975400447845459, Actor Loss: -32.47520923614502
Episode 575: Time: 0.02626943588256836, Total Reward: 16.93643948416275, Q Loss: 7.392434239387512, Actor Loss: -31.381633758544922
Episode 576: Time: 0.03492259979248047, Total Reward: 25.365560768058184, Q Loss: 10.995973706245422, Actor Loss: -40.306575775146484
Episode 577: Time: 0.026200056076049805, Total Reward: 16.965988701004974, Q Loss: 7.480092287063599, Actor Loss: -28.230844497680664
Episode 578: Time: 0.034638404846191406, Total Reward: 25.469473166361908, Q Loss: 9.8560791015625, Actor Loss: -40.724300384521484
Episode 579: Time: 0.035207271575927734, Total Reward: 25.24396707779842, Q Loss: 10.950362801551819, Actor Loss: -41.39779186248779
Episode 580: Time: 0.03477954864501953, Total Reward: 25.308426023068563, Q Loss: 10.85979413986206, Actor Loss: -42.924461364746094
Episode 581: Time: 0.034807443618774414, Total Reward: 25.68335707620439, Q Loss: 13.582237243652344, Actor Loss: -40.720391273498535
Episode 582: Time: 0.02624344825744629, Total Reward: 16.8072984704155, Q Loss: 9.588955521583557, Actor Loss: -33.02106285095215

Episode 583: Time: 0.03461456298828125, Total Reward: 25.423515304057325, Q Loss: 9.14755403995514, Actor Loss: -44.211989402770996
Episode 584: Time: 0.02609562873840332, Total Reward: 16.802943674461574, Q Loss: 7.294552803039551, Actor Loss: -29.946885108947754
Episode 585: Time: 0.02611684799194336, Total Reward: 16.81381312806288, Q Loss: 7.4067277908325195, Actor Loss: -29.857792854309082
Episode 586: Time: 0.043807029724121094, Total Reward: 35.43649977847056, Q Loss: 10.281672596931458, Actor Loss: -54.65605068206787
Episode 587: Time: 0.03480219841003418, Total Reward: 25.674595966828758, Q Loss: 9.610707879066467, Actor Loss: -41.5584602355957
Episode 588: Time: 0.03479433059692383, Total Reward: 25.855300812931887, Q Loss: 9.958056211471558, Actor Loss: -45.860673904418945
Episode 589: Time: 0.0261075496673584, Total Reward: 16.869972795092735, Q Loss: 6.968586564064026, Actor Loss: -31.560019493103027
Episode 590: Time: 0.03508281707763672, Total Reward: 25.768420638658572, Q Loss: 10.083441138267517, Actor Loss: -40.288909912109375
Episode 591: Time: 0.034774065017700195, Total Reward: 25.429258961390314, Q Loss: 8.783252000808716, Actor Loss: -41.49369525909424
Episode 592: Time: 0.0352327823638916, Total Reward: 25.636445785543355, Q Loss: 8.733696103096008, Actor Loss: -43.67661762237549
Episode 593: Time: 0.03478646278381348, Total Reward: 25.436658396991593, Q Loss: 9.33955717086792, Actor Loss: -43.071441650390625
Episode 594: Time: 0.0347440242767334, Total Reward: 25.22718667674293, Q Loss: 9.738728523254395, Actor Loss: -41.881460189819336
Episode 595: Time: 0.034806013107299805, Total Reward: 25.365398271171188, Q Loss: 8.860058307647705, Actor Loss: -41.98006343841553
Episode 596: Time: 0.03474545478820801, Total Reward: 25.595944322772887, Q Loss: 10.865380883216858, Actor Loss: -42.5964994430542
Episode 597: Time: 0.0347137451171875, Total Reward: 25.640428588081132, Q Loss: 10.210813522338867, Actor Loss: -43.62640953063965
Episode 598: Time: 0.035146474838256836, Total Reward: 25.244548715111563, Q Loss: 8.66462254524231, Actor Loss: -42.60223579406738
Episode 599: Time: 0.026164531707763672, Total Reward: 16.965606243362902, Q Loss: 6.837512493133545, Actor Loss: -33.55824947357178
Validation Mean: 20.658598339355976, Validation Std: 4.158577658010111
saving model
Episode 600: Time: 0.026515960693359375, Total Reward: 16.791947217896077, Q Loss: 8.286371231079102, Actor Loss: -30.305274963378906
Episode 601: Time: 0.035310983657836914, Total Reward: 25.583694350113515, Q Loss: 10.30643630027771, Actor Loss: -42.89120388031006
Episode 602: Time: 0.02642536163330078, Total Reward: 16.876249514803696, Q Loss: 9.364221096038818, Actor Loss: -30.038545608520508
Episode 603: Time: 0.03486895561218262, Total Reward: 25.25369932389448, Q Loss: 8.525047183036804, Actor Loss: -48.037766456604004
Episode 604: Time: 0.034859657287597656, Total Reward: 26.03958859697953, Q Loss: 7.32559859752655, Actor Loss: -43.389893531799316
Episode 605: Time: 0.026322603225708008, Total Reward: 16.750826470818154, Q Loss: 7.69805908203125, Actor Loss: -35.24927997589111
Episode 606: Time: 0.0347905158996582, Total Reward: 25.290180724090163, Q Loss: 11.232687950134277, Actor Loss: -40.556517601013184
Episode 607: Time: 0.0261995792388916, Total Reward: 16.921208898792827, Q Loss: 6.9929773807525635, Actor Loss: -32.551334381103516
Episode 608: Time: 0.03523087501525879, Total Reward: 25.887121408410344, Q Loss: 9.380947351455688, Actor Loss: -42.7329740524292
Episode 609: Time: 0.03485584259033203, Total Reward: 25.241867281578934, Q Loss: 9.121448993682861, Actor Loss: -43.68555736541748

Episode 610: Time: 0.02621746063232422, Total Reward: 16.79060559794488, Q Loss: 6.538816809654236, Actor Loss: -35.14302444458008
Episode 611: Time: 0.03474783897399902, Total Reward: 25.19145862739511, Q Loss: 15.0036141872406, Actor Loss: -39.03570556640625
Episode 612: Time: 0.034796953201293945, Total Reward: 25.47324048299489, Q Loss: 12.553651571273804, Actor Loss: -49.079630851745605
Episode 613: Time: 0.03472638130187988, Total Reward: 25.795176299941094, Q Loss: 9.465989589691162, Actor Loss: -39.101158142089844
Episode 614: Time: 0.035277605056762695, Total Reward: 25.7474544161651, Q Loss: 13.411212086677551, Actor Loss: -42.70866012573242
Episode 615: Time: 0.03479504585266113, Total Reward: 25.498457053497205, Q Loss: 13.457430720329285, Actor Loss: -42.73205757141113
Episode 616: Time: 0.026218175888061523, Total Reward: 16.969854128606766, Q Loss: 8.254794001579285, Actor Loss: -30.511171340942383
Episode 617: Time: 0.02629280090332031, Total Reward: 16.83355866509756, Q Loss: 9.19370412826538, Actor Loss: -35.46730327606201
Episode 618: Time: 0.0261533260345459, Total Reward: 17.00663356287238, Q Loss: 7.738829851150513, Actor Loss: -32.44733142852783
Episode 619: Time: 0.03467679023742676, Total Reward: 25.824826689605594, Q Loss: 9.367477893829346, Actor Loss: -43.876654624938965
Episode 620: Time: 0.026302337646484375, Total Reward: 16.921417732765896, Q Loss: 7.9438769817352295, Actor Loss: -32.22343635559082
Episode 621: Time: 0.026508092880249023, Total Reward: 16.94604693181016, Q Loss: 8.050320863723755, Actor Loss: -30.69906234741211
Episode 622: Time: 0.026205062866210938, Total Reward: 16.954102910085123, Q Loss: 9.700588941574097, Actor Loss: -34.770750999450684
Episode 623: Time: 0.03484487533569336, Total Reward: 25.714725588366782, Q Loss: 12.419540643692017, Actor Loss: -43.208316802978516
Episode 624: Time: 0.02627205848693847, Total Reward: 16.939619015058277, Q Loss: 7.579894185066223, Actor Loss: -30.050384521484375
Episode 625: Time: 0.026326656341552734, Total Reward: 16.76862705096622, Q Loss: 9.226437330245972, Actor Loss: -33.0547981262207
Episode 626: Time: 0.026511669158935547, Total Reward: 16.865949029448476, Q Loss: 7.40109395980835, Actor Loss: -35.93937110900879
Episode 627: Time: 0.03507590293884277, Total Reward: 25.839916846956807, Q Loss: 11.393422603607178, Actor Loss: -37.971524238586426
Episode 628: Time: 0.035208940505981445, Total Reward: 25.625085803782945, Q Loss: 10.771045684814453, Actor Loss: -43.00554370880127
Episode 629: Time: 0.0349726676940918, Total Reward: 25.287036267183744, Q Loss: 12.639913558959961, Actor Loss: -43.09882640838623
Episode 630: Time: 0.026323318481445312, Total Reward: 16.901430491895013, Q Loss: 9.118812084197998, Actor Loss: -30.3582820892334
Episode 631: Time: 0.03488659858703613, Total Reward: 25.720724699064284, Q Loss: 8.578832626342773, Actor Loss: -44.248924255371094
Episode 632: Time: 0.03486824035644531, Total Reward: 25.181154613418524, Q Loss: 11.170034646987915, Actor Loss: -42.84605598449707
Episode 633: Time: 0.034948110580444336, Total Reward: 25.72625622937811, Q Loss: 10.137845039367676, Actor Loss: -42.54706859588623
Episode 634: Time: 0.04385256767272949, Total Reward: 34.85988922249578, Q Loss: 13.060950517654419, Actor Loss: -51.48159980773926
Episode 635: Time: 0.02617812156677246, Total Reward: 16.985827974061575, Q Loss: 7.939153432846069, Actor Loss: -32.669203758239746
Episode 636: Time: 0.026749134063720703, Total Reward: 16.934772380653968, Q Loss: 8.585614204406738, Actor Loss: -32.336320877075195
Episode 637: Time: 0.034789085388183594, Total Reward: 25.547722878561483, Q Loss: 11.86833643913269, Actor Loss: -42.111955642700195

Episode 638: Time: 0.026177406311035156, Total Reward: 16.910486240013174, Q Loss: 7.540849924087524, Actor Loss: -29.66853141784668
Episode 639: Time: 0.03491806983947754, Total Reward: 25.72011314943792, Q Loss: 10.195520162582397, Actor Loss: -41.202399253845215
Episode 640: Time: 0.035154104232788086, Total Reward: 25.212484093343278, Q Loss: 9.604215145111084, Actor Loss: -44.239498138427734
Episode 641: Time: 0.035097360610961914, Total Reward: 25.34356373677863, Q Loss: 9.075511932373047, Actor Loss: -43.567580223083496
Episode 642: Time: 0.03489542007446289, Total Reward: 25.431940881626105, Q Loss: 10.777795791625977, Actor Loss: -49.93852519989014
Episode 643: Time: 0.026392459869384766, Total Reward: 16.86323694315829, Q Loss: 7.115846872329712, Actor Loss: -30.653239250183105
Episode 644: Time: 0.03473782539367676, Total Reward: 25.290475986005788, Q Loss: 10.37030577659607, Actor Loss: -45.54902935028076
Episode 645: Time: 0.02625560760498047, Total Reward: 16.882891214365024, Q Loss: 6.172340750694275, Actor Loss: -31.338212966918945
Episode 646: Time: 0.034870147705078125, Total Reward: 25.62907373906155, Q Loss: 10.55960988998413, Actor Loss: -44.58439254760742
Episode 647: Time: 0.026268482208251953, Total Reward: 16.785960683615667, Q Loss: 7.122262477874756, Actor Loss: -33.75706386566162
Episode 648: Time: 0.03531789779663086, Total Reward: 25.40069772392148, Q Loss: 9.209375619888306, Actor Loss: -40.7534294128418
Episode 649: Time: 0.03486180305480957, Total Reward: 25.811024644111235, Q Loss: 9.449350357055664, Actor Loss: -47.5007905960083
Episode 650: Time: 0.03486752510070801, Total Reward: 25.339236070828125, Q Loss: 8.695099234580994, Actor Loss: -46.171488761901855
Episode 651: Time: 0.034821271896362305, Total Reward: 26.145980217472133, Q Loss: 10.432029247283936, Actor Loss: -42.77680587768555
Episode 652: Time: 0.03499770164489746, Total Reward: 26.140652820041808, Q Loss: 10.602002501487732, Actor Loss: -41.60086727142334
Episode 653: Time: 0.03481578826904297, Total Reward: 26.201799319832965, Q Loss: 11.61460280418396, Actor Loss: -42.392727851867676
Episode 654: Time: 0.0264894962310791, Total Reward: 16.872083268768762, Q Loss: 8.85956883430481, Actor Loss: -32.786705017089844
Episode 655: Time: 0.03491520881652832, Total Reward: 25.48055966447469, Q Loss: 10.748249411582947, Actor Loss: -45.45307540893555
Episode 656: Time: 0.02618098258972168, Total Reward: 16.97719868599215, Q Loss: 8.583551406860352, Actor Loss: -32.91890335083008
Episode 657: Time: 0.03488802909851074, Total Reward: 25.220266260570867, Q Loss: 11.501618146896362, Actor Loss: -45.17499542236328
Episode 658: Time: 0.034979820251464844, Total Reward: 25.19565334871883, Q Loss: 11.035483002662659, Actor Loss: -41.13383388519287
Episode 659: Time: 0.034974098205566406, Total Reward: 26.228136316552725, Q Loss: 14.413573741912842, Actor Loss: -41.1754093170166
Episode 660: Time: 0.03519845008850098, Total Reward: 25.96428661373905, Q Loss: 10.466686487197876, Actor Loss: -44.10439109802246
Episode 661: Time: 0.03505706787109375, Total Reward: 25.405929844188996, Q Loss: 12.975202083587646, Actor Loss: -41.25281620025635
Episode 662: Time: 0.03496408462524414, Total Reward: 25.33497022466369, Q Loss: 12.047128438949585, Actor Loss: -42.343621253967285
Episode 663: Time: 0.03476452827453613, Total Reward: 25.788205949267603, Q Loss: 9.450891971588135, Actor Loss: -46.91892337799072
Episode 664: Time: 0.026093721389770508, Total Reward: 16.94895788898402, Q Loss: 7.7514564990997314, Actor Loss: -32.61069679260254
Episode 665: Time: 0.03487515449523926, Total Reward: 25.692251664755116, Q Loss: 10.471058368682861, Actor Loss: -42.56299686431885

Episode 666: Time: 0.035134077072143555, Total Reward: 25.286861267403513, Q Loss: 12.241931676864624, Actor Loss: -43.1621675491333
Episode 667: Time: 0.03488588333129883, Total Reward: 25.38337800636028, Q Loss: 8.792395114898682, Actor Loss: -45.793503761291504
Episode 668: Time: 0.034833669662475586, Total Reward: 26.050676059047706, Q Loss: 11.836373209953308, Actor Loss: -35.836195945739746
Episode 669: Time: 0.034818410873413086, Total Reward: 25.581389015526486, Q Loss: 11.197771310806274, Actor Loss: -42.79241752624512
Episode 670: Time: 0.03482961654663086, Total Reward: 25.657495786808937, Q Loss: 9.57068395614624, Actor Loss: -42.58187675476074
Episode 671: Time: 0.03479623794555664, Total Reward: 25.857733545737027, Q Loss: 8.869922399520874, Actor Loss: -40.2940149307251
Episode 672: Time: 0.03535938262939453, Total Reward: 25.540076807228083, Q Loss: 11.372730731964111, Actor Loss: -43.46778583526611
Episode 673: Time: 0.02622199058532715, Total Reward: 16.911582677383556, Q Loss: 6.207567095756531, Actor Loss: -29.98637294769287
Episode 674: Time: 0.03474020957946777, Total Reward: 25.732546631424963, Q Loss: 9.316230535507202, Actor Loss: -43.824941635131836
Episode 675: Time: 0.02613377571105957, Total Reward: 17.023616366183198, Q Loss: 8.499519109725952, Actor Loss: -34.647860527038574
Episode 676: Time: 0.03481268882751465, Total Reward: 25.64736055001603, Q Loss: 12.385200262069702, Actor Loss: -43.64690017700195
Episode 677: Time: 0.02614569664001465, Total Reward: 16.94890643431675, Q Loss: 7.886138916015625, Actor Loss: -34.29668998718262
Episode 678: Time: 0.0261995792388916, Total Reward: 16.744494117851218, Q Loss: 9.130961179733276, Actor Loss: -33.30311679840088
Episode 679: Time: 0.03507637977600098, Total Reward: 25.587437575581035, Q Loss: 10.708677172660828, Actor Loss: -45.673152923583984
Episode 680: Time: 0.03484368324279785, Total Reward: 25.672328603134485, Q Loss: 11.825119256973267, Actor Loss: -48.94963264465332
Episode 681: Time: 0.03491020202636719, Total Reward: 25.87538168543677, Q Loss: 8.728796243667603, Actor Loss: -46.33981513977051
Episode 682: Time: 0.026310205459594727, Total Reward: 16.925119946001082, Q Loss: 9.02612566947937, Actor Loss: -32.40533447265625
Episode 683: Time: 0.0347743034362793, Total Reward: 25.265276734431446, Q Loss: 12.033841609954834, Actor Loss: -40.49626159667969
Episode 684: Time: 0.03487992286682129, Total Reward: 25.47666021006431, Q Loss: 13.801748991012573, Actor Loss: -40.652968406677246
Episode 685: Time: 0.026166915893554688, Total Reward: 16.968015352314673, Q Loss: 8.746437072753906, Actor Loss: -32.79139804840088
Episode 686: Time: 0.02641034126281738, Total Reward: 16.85300111468388, Q Loss: 11.553430080413818, Actor Loss: -29.93504524230957
Episode 687: Time: 0.02628469467163086, Total Reward: 16.941929936183424, Q Loss: 11.21443223953247, Actor Loss: -28.855968475341797
Episode 688: Time: 0.03505992889404297, Total Reward: 25.171814985022905, Q Loss: 13.111159801483154, Actor Loss: -44.46293830871582
Episode 689: Time: 0.03502154350280762, Total Reward: 25.40624577212848, Q Loss: 12.549682855606079, Actor Loss: -39.48974132537842
Episode 690: Time: 0.034861087799072266, Total Reward: 25.277943995751883, Q Loss: 11.231329917907715, Actor Loss: -40.39345359802246
Episode 691: Time: 0.026279687881469727, Total Reward: 16.94256244530284, Q Loss: 9.237257719039917, Actor Loss: -33.164066314697266
Episode 692: Time: 0.034929513931274414, Total Reward: 25.63141150667919, Q Loss: 10.702709436416626, Actor Loss: -42.42403030395508
Episode 693: Time: 0.035211801528930664, Total Reward: 25.909654038456548, Q Loss: 13.264668941497803, Actor Loss: -43.48779964470215

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Episode 694: Time: 0.03499794006347656, Total Reward: 25.770624597119003, Q
Loss: 9.456138253211975, Actor Loss: -40.91815757751465
Episode 695: Time: 0.03478884696960449, Total Reward: 25.61551482407998, Q L
oss: 10.067280173301697, Actor Loss: -43.326385498046875
Episode 696: Time: 0.026276588439941406, Total Reward: 17.045756616480894, Q
Loss: 8.452565670013428, Actor Loss: -32.937456130981445
Episode 697: Time: 0.03496241569519043, Total Reward: 25.287324876883865, Q
Loss: 13.844793558120728, Actor Loss: -47.962889671325684
Episode 698: Time: 0.034911155700683594, Total Reward: 25.640309359007173, Q
Loss: 10.474371194839478, Actor Loss: -45.277262687683105
Episode 699: Time: 0.03510689735412598, Total Reward: 26.342321228874987, Q
Loss: 10.233031749725342, Actor Loss: -43.15095138549805
Validation Mean: 20.89627737430595, Validation Std: 4.166267386457277
saving model
Episode 700: Time: 0.035042524337768555, Total Reward: 25.786435185872485, Q
Loss: 11.275354385375977, Actor Loss: -42.65842056274414
Episode 701: Time: 0.0354464054107666, Total Reward: 26.01906592850203, Q Lo
ss: 10.995039224624634, Actor Loss: -47.05759239196777
Episode 702: Time: 0.035443782806396484, Total Reward: 25.341223727650192, Q
Loss: 12.31022822856903, Actor Loss: -43.639830589294434
Episode 703: Time: 0.03507637977600098, Total Reward: 25.817010911348405, Q
Loss: 11.424595713615417, Actor Loss: -45.204423904418945
Episode 704: Time: 0.03497123718261719, Total Reward: 25.435321924305597, Q
Loss: 10.278067708015442, Actor Loss: -42.655030250549316
Episode 705: Time: 0.03496670722961426, Total Reward: 25.19282248870045, Q L
oss: 9.926222324371338, Actor Loss: -42.78382396697998
Episode 706: Time: 0.03524136543273926, Total Reward: 25.614405962506343, Q
Loss: 11.612485647201538, Actor Loss: -40.989991188049316
Episode 707: Time: 0.035669565200805664, Total Reward: 25.271240618786287, Q
Loss: 9.404443502426147, Actor Loss: -50.02083683013916
Episode 708: Time: 0.035333871841430664, Total Reward: 25.771248816519932, Q
Loss: 8.792228698730469, Actor Loss: -42.13345146179199
Episode 709: Time: 0.026132822036743164, Total Reward: 16.801445180182675, Q
Loss: 9.07246708869934, Actor Loss: -33.254815101623535
Episode 710: Time: 0.026301145553588867, Total Reward: 16.83207515137226, Q
Loss: 8.224216938018799, Actor Loss: -32.19222927093506
Episode 711: Time: 0.02631235122680664, Total Reward: 16.9639315197929, Q Lo
ss: 9.095459699630737, Actor Loss: -34.14780521392822
Episode 712: Time: 0.034998416900634766, Total Reward: 25.271142400413346, Q
Loss: 9.714482069015503, Actor Loss: -44.76904106140137
Episode 713: Time: 0.02631664276123047, Total Reward: 16.9546486476655, Q Lo
ss: 7.581610202789307, Actor Loss: -34.4869441986084
Episode 714: Time: 0.03498220443725586, Total Reward: 25.66406934457114, Q L
oss: 8.967319369316101, Actor Loss: -42.744462966918945
Episode 715: Time: 0.03534960746765137, Total Reward: 25.39800168469658, Q L
oss: 11.747201323509216, Actor Loss: -44.27846717834473
Episode 716: Time: 0.02633500099182129, Total Reward: 16.866018355319667, Q
Loss: 9.100845575332642, Actor Loss: -30.18232536315918
Episode 717: Time: 0.026263952255249023, Total Reward: 17.035261319581565, Q
Loss: 8.158500909805298, Actor Loss: -33.238969802856445
Episode 718: Time: 0.026388168334960938, Total Reward: 16.890710657903963, Q
Loss: 10.447459936141968, Actor Loss: -33.52550220489502
Episode 719: Time: 0.034862518310546875, Total Reward: 25.389964510246582, Q
Loss: 9.899227857589722, Actor Loss: -37.372801303863525
Episode 720: Time: 0.0348055362701416, Total Reward: 25.839954415132453, Q L
oss: 14.906098842620855, Actor Loss: -44.099157810211118
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Episode 721: Time: 0.03477072715759277, Total Reward: 25.13626713166261, Q Loss: 11.039517879486084, Actor Loss: -44.28984355926514
Episode 722: Time: 0.02657628059387207, Total Reward: 17.02368971761238, Q Loss: 11.793823957443237, Actor Loss: -30.88198947906494
Episode 723: Time: 0.0346982479095459, Total Reward: 25.644251826454244, Q Loss: 8.627987742424011, Actor Loss: -46.667901039123535
Episode 724: Time: 0.03478813171386719, Total Reward: 25.75586707390385, Q Loss: 13.086183786392212, Actor Loss: -39.92578983306885
Episode 725: Time: 0.035002946853637695, Total Reward: 25.31507738987636, Q Loss: 11.666436195373535, Actor Loss: -45.8980827331543
Episode 726: Time: 0.026137590408325195, Total Reward: 16.97573392348269, Q Loss: 8.891107320785522, Actor Loss: -31.280630111694336
Episode 727: Time: 0.03473305702209473, Total Reward: 25.96527941077486, Q Loss: 12.283257722854614, Actor Loss: -43.16520690917969
Episode 728: Time: 0.02616095542907715, Total Reward: 16.892717768421363, Q Loss: 7.795164704322815, Actor Loss: -30.973034858703613
Episode 729: Time: 0.03516387939453125, Total Reward: 25.20533697534751, Q Loss: 10.308178901672363, Actor Loss: -46.54833221435547
Episode 730: Time: 0.03495168685913086, Total Reward: 26.17280395274545, Q Loss: 10.303849339485168, Actor Loss: -47.804213523864746
Episode 731: Time: 0.035511016845703125, Total Reward: 25.276600263817596, Q Loss: 13.465055227279663, Actor Loss: -42.819725036621094
Episode 732: Time: 0.026330947875976562, Total Reward: 16.8817346964556, Q Loss: 9.59166955947876, Actor Loss: -33.51210021972656
Episode 733: Time: 0.02621769905090332, Total Reward: 16.88901380829204, Q Loss: 7.872149705886841, Actor Loss: -33.65353965759277
Episode 734: Time: 0.035082340240478516, Total Reward: 25.553093150156528, Q Loss: 9.46002995967865, Actor Loss: -45.62469005584717
Episode 735: Time: 0.03476548194885254, Total Reward: 25.281890633924892, Q Loss: 10.907778263092041, Actor Loss: -42.78447103500366
Episode 736: Time: 0.03515934944152832, Total Reward: 25.36249940622949, Q Loss: 9.39495575428009, Actor Loss: -44.495171546936035
Episode 737: Time: 0.03498482704162598, Total Reward: 25.547662327557315, Q Loss: 11.395522832870483, Actor Loss: -43.34983730316162
Episode 738: Time: 0.026215076446533203, Total Reward: 16.86137769249815, Q Loss: 9.827252388000488, Actor Loss: -35.45587635040283
Episode 739: Time: 0.03479599952697754, Total Reward: 25.39803187739, Q Loss: 11.244604587554932, Actor Loss: -48.379061698913574
Episode 740: Time: 0.026139497756958008, Total Reward: 16.956717803336414, Q Loss: 9.65152645111084, Actor Loss: -31.935298919677734
Episode 741: Time: 0.03479743003845215, Total Reward: 25.31611923744399, Q Loss: 11.899492263793945, Actor Loss: -45.02248573303223
Episode 742: Time: 0.03493547439575195, Total Reward: 25.400146218077552, Q Loss: 10.817301988601685, Actor Loss: -41.93632411956787
Episode 743: Time: 0.03518080711364746, Total Reward: 25.251505950909177, Q Loss: 12.083655595779419, Actor Loss: -44.40126991271973
Episode 744: Time: 0.034918785095214844, Total Reward: 25.50641755602133, Q Loss: 11.266448020935059, Actor Loss: -42.244638442993164
Episode 745: Time: 0.034806251525878906, Total Reward: 25.60321664922238, Q Loss: 11.277157068252563, Actor Loss: -43.95222187042236
Episode 746: Time: 0.03485846519470215, Total Reward: 25.913832423751504, Q Loss: 9.558327913284302, Actor Loss: -46.10115146636963
Episode 747: Time: 0.03507661819458008, Total Reward: 25.33933954313327, Q Loss: 13.308166265487671, Actor Loss: -42.0534553527832
Episode 748: Time: 0.03494882583618164, Total Reward: 25.56075975118289, Q Loss: 11.861180782318115, Actor Loss: -47.040618896484375

Episode 749: Time: 0.03526902198791504, Total Reward: 25.58809968202623, Q Loss: 9.295466542243958, Actor Loss: -41.658464431762695
Episode 750: Time: 0.03490042686462402, Total Reward: 25.85670732403551, Q Loss: 11.156265020370483, Actor Loss: -39.4977388381958
Episode 751: Time: 0.026224136352539062, Total Reward: 16.977242504695358, Q Loss: 8.360556840896606, Actor Loss: -33.50994873046875
Episode 752: Time: 0.03483414649963379, Total Reward: 25.22276361075142, Q Loss: 13.189063787460327, Actor Loss: -45.36576843261719
Episode 753: Time: 0.03484821319580078, Total Reward: 25.190387949034545, Q Loss: 12.588265657424927, Actor Loss: -42.13985633850098
Episode 754: Time: 0.03490495681762695, Total Reward: 26.14964953465137, Q Loss: 11.197152137756348, Actor Loss: -46.448166847229004
Episode 755: Time: 0.02617049217224121, Total Reward: 16.89553865427907, Q Loss: 6.007591724395752, Actor Loss: -33.16245079040527
Episode 756: Time: 0.03507733345031738, Total Reward: 25.847448033234134, Q Loss: 12.154924631118774, Actor Loss: -42.22073554992676
Episode 757: Time: 0.035042762756347656, Total Reward: 25.49898120413855, Q Loss: 10.363464832305908, Actor Loss: -46.02652072906494
Episode 758: Time: 0.034891366958618164, Total Reward: 25.217854310500172, Q Loss: 12.260817050933838, Actor Loss: -41.16140651702881
Episode 759: Time: 0.0348207950592041, Total Reward: 25.252563568949377, Q Loss: 11.807796239852905, Actor Loss: -42.804222106933594
Episode 760: Time: 0.03539562225341797, Total Reward: 25.64965004064787, Q Loss: 10.132168292999268, Actor Loss: -41.25925159454346
Episode 761: Time: 0.03496289253234863, Total Reward: 26.178564431752918, Q Loss: 13.513221979141235, Actor Loss: -48.54923629760742
Episode 762: Time: 0.026555538177490234, Total Reward: 16.949046871307598, Q Loss: 9.464867353439331, Actor Loss: -32.43516540527344
Episode 763: Time: 0.026296138763427734, Total Reward: 16.927684281377065, Q Loss: 7.26689350605011, Actor Loss: -31.042838096618652
Episode 764: Time: 0.02647566795349121, Total Reward: 16.967455123183264, Q Loss: 8.789331674575806, Actor Loss: -32.14097023010254
Episode 765: Time: 0.03472900390625, Total Reward: 25.15021953363373, Q Loss: 10.831443309783936, Actor Loss: -45.07020664215088
Episode 766: Time: 0.0261993408203125, Total Reward: 16.922508220909194, Q Loss: 10.267041444778442, Actor Loss: -32.78107738494873
Episode 767: Time: 0.03463006019592285, Total Reward: 25.592129665768677, Q Loss: 12.230784893035889, Actor Loss: -46.31026744842529
Episode 768: Time: 0.026332855224609375, Total Reward: 16.941922859484826, Q Loss: 10.051886796951294, Actor Loss: -31.353291511535645
Episode 769: Time: 0.03496408462524414, Total Reward: 25.70267035773662, Q Loss: 10.564541101455688, Actor Loss: -44.743553161621094
Episode 770: Time: 0.026299476623535156, Total Reward: 16.944803061890962, Q Loss: 10.265876054763794, Actor Loss: -31.746140480041504
Episode 771: Time: 0.04340934753417969, Total Reward: 35.130839724305474, Q Loss: 13.193903684616089, Actor Loss: -54.139522552490234
Episode 772: Time: 0.03482389450073242, Total Reward: 25.300829008290496, Q Loss: 12.104487419128418, Actor Loss: -45.08478546142578
Episode 773: Time: 0.026109695434570312, Total Reward: 16.974580809150755, Q Loss: 7.690409183502197, Actor Loss: -33.07423210144043
Episode 774: Time: 0.034935712814331055, Total Reward: 25.344197377493863, Q Loss: 12.963347911834717, Actor Loss: -46.73017883300781
Episode 775: Time: 0.03521132469177246, Total Reward: 25.1255290119685, Q Loss: 10.8198721408844, Actor Loss: -48.50849914550781
Episode 776: Time: 0.026187419891357422, Total Reward: 16.862532892294432, Q Loss: 7.082547068595886, Actor Loss: -34.963833808898926

Episode 777: Time: 0.03484225273132324, Total Reward: 25.210661698018775, Q Loss: 11.791688680648804, Actor Loss: -45.159156799316406
Episode 778: Time: 0.03480863571166992, Total Reward: 25.30008379859272, Q Loss: 12.532849788665771, Actor Loss: -41.29508304595947
Episode 779: Time: 0.0349118709564209, Total Reward: 25.632237910199347, Q Loss: 11.7959725856781, Actor Loss: -44.6796817779541
Episode 780: Time: 0.026161909103393555, Total Reward: 16.797126824791196, Q Loss: 8.796046495437622, Actor Loss: -33.63655376434326
Episode 781: Time: 0.03465151786804199, Total Reward: 25.354838541114045, Q Loss: 13.756237268447876, Actor Loss: -41.65212345123291
Episode 782: Time: 0.02638840675354004, Total Reward: 16.935857090471828, Q Loss: 10.213850259780884, Actor Loss: -34.12502956390381
Episode 783: Time: 0.034914255142211914, Total Reward: 25.363466699446278, Q Loss: 12.856619596481323, Actor Loss: -45.53091621398926
Episode 784: Time: 0.03483843803405762, Total Reward: 25.143686339338807, Q Loss: 13.72233247756958, Actor Loss: -47.751235008239746
Episode 785: Time: 0.026150941848754883, Total Reward: 16.807527356662614, Q Loss: 7.861603140830994, Actor Loss: -31.63990592956543
Episode 786: Time: 0.026177167892456055, Total Reward: 16.802537766595496, Q Loss: 13.115461349487305, Actor Loss: -33.20921230316162
Episode 787: Time: 0.02631378173828125, Total Reward: 16.928406573620872, Q Loss: 12.077503204345703, Actor Loss: -36.78938293457031
Episode 788: Time: 0.02636885643005371, Total Reward: 16.926766623612544, Q Loss: 8.855225086212158, Actor Loss: -36.23124408721924
Episode 789: Time: 0.035454750061035156, Total Reward: 25.90543535992151, Q Loss: 13.946857690811157, Actor Loss: -45.571377754211426
Episode 790: Time: 0.02634263038635254, Total Reward: 16.833438882928263, Q Loss: 10.384941101074219, Actor Loss: -31.98682975769043
Episode 791: Time: 0.034949302673339844, Total Reward: 25.141448801709732, Q Loss: 13.701228618621826, Actor Loss: -45.228299140930176
Episode 792: Time: 0.035112619400024414, Total Reward: 25.801704047268338, Q Loss: 12.242957592010498, Actor Loss: -46.298770904541016
Episode 793: Time: 0.03489804267883301, Total Reward: 25.378152670831426, Q Loss: 14.695731163024902, Actor Loss: -45.58112335205078
Episode 794: Time: 0.03490591049194336, Total Reward: 26.03862372820261, Q Loss: 13.84228229522705, Actor Loss: -43.24598693847656
Episode 795: Time: 0.03540325164794922, Total Reward: 25.50958277002203, Q Loss: 13.164647579193115, Actor Loss: -45.06579780578613
Episode 796: Time: 0.02620220184326172, Total Reward: 16.84398608023383, Q Loss: 9.568153619766235, Actor Loss: -33.749053955078125
Episode 797: Time: 0.026308536529541016, Total Reward: 16.963972039909518, Q Loss: 9.314056158065796, Actor Loss: -34.00031661987305
Episode 798: Time: 0.03498268127441406, Total Reward: 25.3730121351302, Q Loss: 12.451882123947144, Actor Loss: -39.70191478729248
Episode 799: Time: 0.03484225273132324, Total Reward: 25.521985317651836, Q Loss: 9.414738893508911, Actor Loss: -43.5957670211792
Validation Mean: 21.080157277144153, Validation Std: 4.180473202617302
saving model
Episode 800: Time: 0.03519606590270996, Total Reward: 26.008392369063177, Q Loss: 11.78499698638916, Actor Loss: -42.65592098236084
Episode 801: Time: 0.03513813018798828, Total Reward: 25.390427219017546, Q Loss: 12.450350046157837, Actor Loss: -43.16076469421387
Episode 802: Time: 0.026302337646484375, Total Reward: 16.940290807732502, Q Loss: 8.822824239730835, Actor Loss: -32.574978828430176
Episode 803: Time: 0.03495073318481445, Total Reward: 25.261550402348313, Q Loss: 11.208606481552124, Actor Loss: -42.11540985107422

Episode 804: Time: 0.035053253173828125, Total Reward: 25.274610166324678, Q Loss: 11.163393992385864, Actor Loss: -44.31592559814453
Episode 805: Time: 0.03543972969055176, Total Reward: 25.475898386396548, Q Loss: 11.091676473617554, Actor Loss: -43.87392234802246
Episode 806: Time: 0.03506875038146973, Total Reward: 25.943126479595648, Q Loss: 11.185870170593262, Actor Loss: -46.007232666015625
Episode 807: Time: 0.03502082824707031, Total Reward: 25.308481099534312, Q Loss: 13.894815921783447, Actor Loss: -41.32961177825928
Episode 808: Time: 0.03516530990600586, Total Reward: 25.296771672557792, Q Loss: 12.079100608825684, Actor Loss: -39.23341178894043
Episode 809: Time: 0.02634716033935547, Total Reward: 16.825674844851356, Q Loss: 8.421400547027588, Actor Loss: -30.81796646118164
Episode 810: Time: 0.0348970890045166, Total Reward: 26.146181194997943, Q Loss: 12.793369054794312, Actor Loss: -44.139760971069336
Episode 811: Time: 0.026252031326293945, Total Reward: 16.714159572905906, Q Loss: 10.948128938674927, Actor Loss: -32.319833755493164
Episode 812: Time: 0.03551936149597168, Total Reward: 25.38461128908228, Q Loss: 13.433070659637451, Actor Loss: -42.03558158874512
Episode 813: Time: 0.027014970779418945, Total Reward: 16.917151784177264, Q Loss: 9.848713636398315, Actor Loss: -32.783772468566895
Episode 814: Time: 0.03507113456726074, Total Reward: 25.244068897527377, Q Loss: 14.22083854675293, Actor Loss: -45.368289947509766
Episode 815: Time: 0.03506660461425781, Total Reward: 25.313073729216033, Q Loss: 11.326394319534302, Actor Loss: -42.16038513183594
Episode 816: Time: 0.03486967086791992, Total Reward: 25.193787866906003, Q Loss: 12.490278005599976, Actor Loss: -46.30580234527588
Episode 817: Time: 0.03491497039794922, Total Reward: 25.20020464989645, Q Loss: 12.482760429382324, Actor Loss: -44.38181781768799
Episode 818: Time: 0.02620530128479004, Total Reward: 16.93879135196178, Q Loss: 11.317332983016968, Actor Loss: -36.45471477508545
Episode 819: Time: 0.035291433334350586, Total Reward: 25.198901270540173, Q Loss: 13.765272855758667, Actor Loss: -44.39350509643555
Episode 820: Time: 0.03489232063293457, Total Reward: 25.15987621218097, Q Loss: 11.207948207855225, Actor Loss: -40.37548065185547
Episode 821: Time: 0.02632308006286621, Total Reward: 16.885947898134138, Q Loss: 8.928662776947021, Actor Loss: -36.10954761505127
Episode 822: Time: 0.03502058982849121, Total Reward: 25.521345898764643, Q Loss: 11.58175277709961, Actor Loss: -44.3866081237793
Episode 823: Time: 0.026201963424682617, Total Reward: 16.940640229475996, Q Loss: 9.780447721481323, Actor Loss: -37.29428482055664
Episode 824: Time: 0.034850120544433594, Total Reward: 25.50828360156987, Q Loss: 13.256061792373657, Actor Loss: -44.714712142944336
Episode 825: Time: 0.034857988357543945, Total Reward: 26.024427182522988, Q Loss: 11.331374883651733, Actor Loss: -43.75079917907715
Episode 826: Time: 0.03528141975402832, Total Reward: 25.956429430048797, Q Loss: 10.892935991287231, Actor Loss: -43.057533264160156
Episode 827: Time: 0.034958600997924805, Total Reward: 25.62800544064695, Q Loss: 10.643068432807922, Actor Loss: -46.605567932128906
Episode 828: Time: 0.026234865188598633, Total Reward: 16.996279092833035, Q Loss: 7.383248925209045, Actor Loss: -34.21048164367676
Episode 829: Time: 0.03491568565368652, Total Reward: 25.465673019852318, Q Loss: 10.450636863708496, Actor Loss: -41.45307731628418
Episode 830: Time: 0.03486466407775879, Total Reward: 25.764476072276324, Q Loss: 12.508766412734985, Actor Loss: -44.08903121948242
Episode 831: Time: 0.026286840438842773, Total Reward: 16.986896162721504, Q Loss: 9.358350038528442, Actor Loss: -35.924753189086914

Episode 832: Time: 0.034940481185913086, Total Reward: 25.629983779895152, Q Loss: 14.343212604522705, Actor Loss: -45.11437702178955
Episode 833: Time: 0.026581764221191406, Total Reward: 16.931804363335324, Q Loss: 11.204745531082153, Actor Loss: -32.0009183883667
Episode 834: Time: 0.03496599197387695, Total Reward: 25.944158698306122, Q Loss: 13.462955713272095, Actor Loss: -46.598873138427734
Episode 835: Time: 0.03483700752258301, Total Reward: 25.327672114971957, Q Loss: 12.99621868133545, Actor Loss: -43.79588508605957
Episode 836: Time: 0.026398897171020508, Total Reward: 16.91143164721693, Q Loss: 9.25317907333374, Actor Loss: -33.810272216796875
Episode 837: Time: 0.03492999076843262, Total Reward: 25.576354670103065, Q Loss: 12.974921464920044, Actor Loss: -44.35768127441406
Episode 838: Time: 0.034815311431884766, Total Reward: 25.499178148238943, Q Loss: 12.12095594406128, Actor Loss: -46.856733322143555
Episode 839: Time: 0.03514218330383301, Total Reward: 25.925280232379777, Q Loss: 12.285226106643677, Actor Loss: -42.83330154418945
Episode 840: Time: 0.034902334213256836, Total Reward: 25.437340172823433, Q Loss: 10.444486618041992, Actor Loss: -44.01078224182129
Episode 841: Time: 0.03487873077392578, Total Reward: 25.32259465881998, Q Loss: 13.190525531768799, Actor Loss: -47.55303955078125
Episode 842: Time: 0.035008907318115234, Total Reward: 25.911177928099693, Q Loss: 11.515514850616455, Actor Loss: -45.65700340270996
Episode 843: Time: 0.03500986099243164, Total Reward: 25.362113607922876, Q Loss: 12.944983959197998, Actor Loss: -43.96771240234375
Episode 844: Time: 0.03524446487426758, Total Reward: 25.308000492117714, Q Loss: 13.514840602874756, Actor Loss: -46.93070983886719
Episode 845: Time: 0.035340309143066406, Total Reward: 25.989523784082003, Q Loss: 12.543577909469604, Actor Loss: -44.54129695892334
Episode 846: Time: 0.026279211044311523, Total Reward: 16.884342671006383, Q Loss: 7.297391414642334, Actor Loss: -36.755876541137695
Episode 847: Time: 0.03520774841308594, Total Reward: 25.44072639238483, Q Loss: 11.310677289962769, Actor Loss: -46.1480712890625
Episode 848: Time: 0.03476405143737793, Total Reward: 26.126792871518457, Q Loss: 10.527257919311523, Actor Loss: -44.97147846221924
Episode 849: Time: 0.03489947319030762, Total Reward: 25.44293021274747, Q Loss: 12.489807367324829, Actor Loss: -44.525086402893066
Episode 850: Time: 0.034925222396850586, Total Reward: 25.481220915919085, Q Loss: 11.551118612289429, Actor Loss: -46.48258399963379
Episode 851: Time: 0.026440858840942383, Total Reward: 16.973974123451555, Q Loss: 10.417372226715088, Actor Loss: -34.68265724182129
Episode 852: Time: 0.035088300704956055, Total Reward: 25.358663030334586, Q Loss: 14.214322090148926, Actor Loss: -43.876304626464844
Episode 853: Time: 0.02631211280822754, Total Reward: 16.947916253941237, Q Loss: 8.421079635620117, Actor Loss: -32.135318756103516
Episode 854: Time: 0.03483915328979492, Total Reward: 25.297968868015513, Q Loss: 11.570751428604126, Actor Loss: -43.969661712646484
Episode 855: Time: 0.026462078094482422, Total Reward: 16.956904476668274, Q Loss: 11.282092332839966, Actor Loss: -33.74471473693848
Episode 856: Time: 0.03484606742858887, Total Reward: 26.103415214966557, Q Loss: 12.303890705108643, Actor Loss: -44.45748996734619
Episode 857: Time: 0.03487372398376465, Total Reward: 26.02224504049309, Q Loss: 12.896097421646118, Actor Loss: -43.7719669342041
Episode 858: Time: 0.03496885299682617, Total Reward: 26.057106741044525, Q Loss: 15.19154667854309, Actor Loss: -45.643351554870605
Episode 859: Time: 0.026534557342529297, Total Reward: 16.907883805032757, Q Loss: 9.22502875328064, Actor Loss: -32.47917461395264

Episode 860: Time: 0.034883737564086914, Total Reward: 26.067665215591642, Q Loss: 13.269522190093994, Actor Loss: -47.140501976013184
Episode 861: Time: 0.03496694564819336, Total Reward: 25.80566604370238, Q Loss: 13.510457992553711, Actor Loss: -45.19962978363037
Episode 862: Time: 0.03486442565917969, Total Reward: 25.202570735029276, Q Loss: 13.410843133926392, Actor Loss: -40.36948013305664
Episode 863: Time: 0.03508639335632324, Total Reward: 25.430081252981868, Q Loss: 12.27926254272461, Actor Loss: -40.49108409881592
Episode 864: Time: 0.03532004356384277, Total Reward: 25.131009624283244, Q Loss: 10.184411764144897, Actor Loss: -45.73136615753174
Episode 865: Time: 0.03527975082397461, Total Reward: 26.16890848850882, Q Loss: 12.446022748947144, Actor Loss: -42.86334419250488
Episode 866: Time: 0.03491067886352539, Total Reward: 25.732959438575687, Q Loss: 13.33476996421814, Actor Loss: -49.46937656402588
Episode 867: Time: 0.035044193267822266, Total Reward: 25.93861179359163, Q Loss: 13.482995748519897, Actor Loss: -43.346938133239746
Episode 868: Time: 0.02619624137878418, Total Reward: 16.93087903803461, Q Loss: 9.833721160888672, Actor Loss: -36.08598518371582
Episode 869: Time: 0.03486776351928711, Total Reward: 25.301659436814376, Q Loss: 14.023579597473145, Actor Loss: -44.56338882446289
Episode 870: Time: 0.034946441650390625, Total Reward: 25.423262953909592, Q Loss: 12.205453634262085, Actor Loss: -43.29463195800781
Episode 871: Time: 0.026105403900146484, Total Reward: 16.809711689349953, Q Loss: 8.463847637176514, Actor Loss: -28.373743057250977
Episode 872: Time: 0.03527474403381348, Total Reward: 26.024614867459558, Q Loss: 12.98436975479126, Actor Loss: -43.418707847595215
Episode 873: Time: 0.026319503784179688, Total Reward: 16.99026249194785, Q Loss: 12.133123636245728, Actor Loss: -32.72489070892334
Episode 874: Time: 0.03491854667663574, Total Reward: 26.014302225499456, Q Loss: 15.178157806396484, Actor Loss: -38.58262348175049
Episode 875: Time: 0.02625417709350586, Total Reward: 16.952775741991818, Q Loss: 9.80261778831482, Actor Loss: -33.151917457580566
Episode 876: Time: 0.035161495208740234, Total Reward: 25.61948077303037, Q Loss: 14.22102952003479, Actor Loss: -44.42063522338867
Episode 877: Time: 0.03491067886352539, Total Reward: 25.830144193349188, Q Loss: 13.324838399887085, Actor Loss: -41.696866035461426
Episode 878: Time: 0.03484630584716797, Total Reward: 25.592550004025668, Q Loss: 11.588096380233765, Actor Loss: -44.31618118286133
Episode 879: Time: 0.035263776779174805, Total Reward: 25.390939261160806, Q Loss: 14.382853269577026, Actor Loss: -44.959994316101074
Episode 880: Time: 0.026381969451904297, Total Reward: 16.88677521458043, Q Loss: 8.32835054397583, Actor Loss: -35.28017616271973
Episode 881: Time: 0.03485345840454101, Total Reward: 26.2586610393187, Q Loss: 16.228804349899292, Actor Loss: -42.4785213470459
Episode 882: Time: 0.03485226631164551, Total Reward: 25.400002307088783, Q Loss: 13.340967893600464, Actor Loss: -48.837029457092285
Episode 883: Time: 0.02610492706298828, Total Reward: 16.99594225524942, Q Loss: 9.957017660140991, Actor Loss: -32.35338497161865
Episode 884: Time: 0.03484201431274414, Total Reward: 26.106750873735315, Q Loss: 15.12603759765625, Actor Loss: -44.243409156799316
Episode 885: Time: 0.03479886054992676, Total Reward: 25.184122765494408, Q Loss: 12.713532209396362, Actor Loss: -47.13850784301758
Episode 886: Time: 0.035836219787597656, Total Reward: 25.343336569924393, Q Loss: 15.330478191375732, Actor Loss: -43.52756118774414
Episode 887: Time: 0.035062074661254888, Total Reward: 25.24251454434819, Q Loss: 11.550055265426636, Actor Loss: -45.71158313751221

Episode 888: Time: 0.0348970890045166, Total Reward: 25.773265285466923, Q Loss: 12.134422302246094, Actor Loss: -44.931735038757324
Episode 889: Time: 0.03506016731262207, Total Reward: 25.91526787156552, Q Loss: 13.619471549987793, Actor Loss: -47.607895851135254
Episode 890: Time: 0.03508949279785156, Total Reward: 25.90576214812512, Q Loss: 13.709201335906982, Actor Loss: -46.51577281951904
Episode 891: Time: 0.03481769561767578, Total Reward: 25.236123520936538, Q Loss: 15.036187410354614, Actor Loss: -44.64229202270508
Episode 892: Time: 0.026447296142578125, Total Reward: 16.889023092208486, Q Loss: 8.90337872505188, Actor Loss: -31.997611045837402
Episode 893: Time: 0.035004615783691406, Total Reward: 25.337128965453683, Q Loss: 14.238773584365845, Actor Loss: -43.25378227233887
Episode 894: Time: 0.03514742851257324, Total Reward: 25.21446422378581, Q Loss: 11.818329334259033, Actor Loss: -45.08965301513672
Episode 895: Time: 0.026285648345947266, Total Reward: 16.908566064770277, Q Loss: 8.969679355621338, Actor Loss: -35.49928569793701
Episode 896: Time: 0.0349421501159668, Total Reward: 26.198260342934333, Q Loss: 15.407717943191528, Actor Loss: -40.97815418243408
Episode 897: Time: 0.03481268882751465, Total Reward: 25.69554077944744, Q Loss: 14.791056871414185, Actor Loss: -43.5664005279541
Episode 898: Time: 0.035501956939697266, Total Reward: 25.745571628446285, Q Loss: 13.19486927986145, Actor Loss: -43.266475677490234
Episode 899: Time: 0.026307344436645508, Total Reward: 16.93767176000167, Q Loss: 13.801474809646606, Actor Loss: -34.96976184844971
Validation Mean: 21.230090173540567, Validation Std: 4.174042780012381
saving model
Episode 900: Time: 0.026533842086791992, Total Reward: 16.866719408741076, Q Loss: 10.796597719192505, Actor Loss: -32.37431812286377
Episode 901: Time: 0.026480913162231445, Total Reward: 16.962290434083307, Q Loss: 10.848208665847778, Actor Loss: -32.86459922790527
Episode 902: Time: 0.03489518165588379, Total Reward: 25.602341606272475, Q Loss: 14.548295259475708, Actor Loss: -45.10167121887207
Episode 903: Time: 0.02624988555908203, Total Reward: 16.864847123668646, Q Loss: 10.391058206558228, Actor Loss: -29.6363468170166
Episode 904: Time: 0.026300430297851562, Total Reward: 16.941864421403142, Q Loss: 14.85008716583252, Actor Loss: -34.73781394958496
Episode 905: Time: 0.0346982479095459, Total Reward: 26.09447681775862, Q Loss: 16.519755840301514, Actor Loss: -44.63773822784424
Episode 906: Time: 0.026196718215942383, Total Reward: 16.8181539094002, Q Loss: 14.049151182174683, Actor Loss: -27.88507843017578
Episode 907: Time: 0.034821510314941406, Total Reward: 25.591331958077458, Q Loss: 11.052797079086304, Actor Loss: -42.52766799926758
Episode 908: Time: 0.035152435302734375, Total Reward: 25.30447295141172, Q Loss: 13.269733190536499, Actor Loss: -47.45981788635254
Episode 909: Time: 0.026182889938354492, Total Reward: 16.95891432112801, Q Loss: 10.502262115478516, Actor Loss: -33.03248310089111
Episode 910: Time: 0.026177167892456055, Total Reward: 16.961046534882797, Q Loss: 8.854643106460571, Actor Loss: -33.64719295501709
Episode 911: Time: 0.03470253944396973, Total Reward: 25.461339805411164, Q Loss: 9.78949522972107, Actor Loss: -44.187092781066895
Episode 912: Time: 0.03509664535522461, Total Reward: 25.309005013243976, Q Loss: 12.696998119354248, Actor Loss: -45.87187480926514
Episode 913: Time: 0.03467130661010742, Total Reward: 25.49611958509193, Q Loss: 11.129202604293823, Actor Loss: -49.166786193847656
Episode 914: Time: 0.026153087615966797, Total Reward: 16.95109359938623, Q Loss: 9.999273777008057, Actor Loss: -32.66365718841553

Episode 915: Time: 0.03504133224487305, Total Reward: 25.269067791787087, Q Loss: 11.775262117385864, Actor Loss: -43.68545341491699
Episode 916: Time: 0.034799814224243164, Total Reward: 25.490150702588966, Q Loss: 15.390714168548584, Actor Loss: -44.115471839904785
Episode 917: Time: 0.034726858139038086, Total Reward: 26.244114584005786, Q Loss: 12.109437942504883, Actor Loss: -45.43723106384277
Episode 918: Time: 0.04340767860412598, Total Reward: 35.02812307665358, Q Loss: 19.526578664779663, Actor Loss: -55.987966537475586
Episode 919: Time: 0.02626282119750977, Total Reward: 16.907185311977432, Q Loss: 8.662866592407227, Actor Loss: -33.66801738739014
Episode 920: Time: 0.0348207950592041, Total Reward: 25.44160031341491, Q Loss: 11.868207693099976, Actor Loss: -44.325042724609375
Episode 921: Time: 0.03502202033996582, Total Reward: 25.96175841403237, Q Loss: 14.082750797271729, Actor Loss: -45.6682825088501
Episode 922: Time: 0.03483080863952637, Total Reward: 25.305912767321598, Q Loss: 13.440371751785278, Actor Loss: -44.15218734741211
Episode 923: Time: 0.03478264808654785, Total Reward: 25.229998841997098, Q Loss: 19.139455795288086, Actor Loss: -45.90596961975098
Episode 924: Time: 0.02612900733947754, Total Reward: 16.928894772151914, Q Loss: 11.859108924865723, Actor Loss: -35.753363609313965
Episode 925: Time: 0.03510618209838867, Total Reward: 25.32560890839906, Q Loss: 16.880260229110718, Actor Loss: -44.14372158050537
Episode 926: Time: 0.02637481689453125, Total Reward: 16.9822110853985, Q Loss: 12.228118896484375, Actor Loss: -32.306302070617676
Episode 927: Time: 0.034836769104003906, Total Reward: 25.601154621481054, Q Loss: 14.47991394996643, Actor Loss: -46.96820068359375
Episode 928: Time: 0.03519582748413086, Total Reward: 25.547500222909793, Q Loss: 14.451706647872925, Actor Loss: -45.80805587768555
Episode 929: Time: 0.026236772537231445, Total Reward: 16.944514427988867, Q Loss: 18.175992012023926, Actor Loss: -36.61547565460205
Episode 930: Time: 0.034961700439453125, Total Reward: 25.761631524801178, Q Loss: 15.642788887023926, Actor Loss: -41.677350997924805
Episode 931: Time: 0.03473615646362305, Total Reward: 25.166251184050793, Q Loss: 16.85027527809143, Actor Loss: -47.82999801635742
Episode 932: Time: 0.026266098022460938, Total Reward: 16.895846996561318, Q Loss: 12.148599863052368, Actor Loss: -32.243990898132324
Episode 933: Time: 0.03486061096191406, Total Reward: 25.89832155143926, Q Loss: 14.726739168167114, Actor Loss: -41.03893566131592
Episode 934: Time: 0.03481626510620117, Total Reward: 25.880632264177308, Q Loss: 14.272405624389648, Actor Loss: -41.36248302459717
Episode 935: Time: 0.035088300704956055, Total Reward: 25.342619621140088, Q Loss: 11.075559377670288, Actor Loss: -50.755483627319336
Episode 936: Time: 0.03493618965148926, Total Reward: 26.06506635558361, Q Loss: 14.105688095092773, Actor Loss: -48.10679244995117
Episode 937: Time: 0.03483843803405762, Total Reward: 25.21889151108497, Q Loss: 12.269744396209717, Actor Loss: -43.68650722503662
Episode 938: Time: 0.03509211540222168, Total Reward: 25.285682039763252, Q Loss: 15.074886322021484, Actor Loss: -43.50278568267822
Episode 939: Time: 0.03493094444274902, Total Reward: 25.80793667472015, Q Loss: 13.96257209777832, Actor Loss: -48.303324699401855
Episode 940: Time: 0.03479361534118652, Total Reward: 25.77841548631935, Q Loss: 14.067763566970825, Actor Loss: -43.693050384521484
Episode 941: Time: 0.026558876037597656, Total Reward: 16.867179547157818, Q Loss: 10.706252336502075, Actor Loss: -34.67625427246094
Episode 942: Time: 0.026214599609375, Total Reward: 16.922823140932962, Q Loss: 11.191510438919067, Actor Loss: -33.93036460876465

Episode 943: Time: 0.034888505935668945, Total Reward: 25.189714557725196, Q Loss: 11.776627540588379, Actor Loss: -47.258649826049805
Episode 944: Time: 0.034822702407836914, Total Reward: 25.375005660099315, Q Loss: 11.224324822425842, Actor Loss: -46.60767078399658
Episode 945: Time: 0.026178836822509766, Total Reward: 16.946594671552045, Q Loss: 13.693017482757568, Actor Loss: -34.808356285095215
Episode 946: Time: 0.03474235534667969, Total Reward: 25.509830623902538, Q Loss: 16.154072284698486, Actor Loss: -45.593793869018555
Episode 947: Time: 0.034780025482177734, Total Reward: 25.20717614151077, Q Loss: 14.19162368774414, Actor Loss: -43.48259735107422
Episode 948: Time: 0.03532814979553223, Total Reward: 25.69217542458459, Q Loss: 12.112433314323425, Actor Loss: -43.53849124908447
Episode 949: Time: 0.03493976593017578, Total Reward: 25.43841819954244, Q Loss: 9.299997329711914, Actor Loss: -46.72347640991211
Episode 950: Time: 0.02630329132080078, Total Reward: 16.868442821794932, Q Loss: 9.584626197814941, Actor Loss: -31.96837043762207
Episode 951: Time: 0.035001516342163086, Total Reward: 25.82170797678375, Q Loss: 15.558103322982788, Actor Loss: -44.78730392456055
Episode 952: Time: 0.03487515449523926, Total Reward: 25.55032285746487, Q Loss: 16.087701320648193, Actor Loss: -47.07037544250488
Episode 953: Time: 0.034863948822021484, Total Reward: 25.565372319491974, Q Loss: 12.315465927124023, Actor Loss: -44.38148880004883
Episode 954: Time: 0.03510642051696777, Total Reward: 25.850991406706274, Q Loss: 16.192752599716187, Actor Loss: -48.39157485961914
Episode 955: Time: 0.034874677658081055, Total Reward: 25.140253244480295, Q Loss: 12.316893815994263, Actor Loss: -48.89734649658203
Episode 956: Time: 0.03481578826904297, Total Reward: 25.461791811177807, Q Loss: 13.161215782165527, Actor Loss: -44.178077697753906
Episode 957: Time: 0.026204347610473633, Total Reward: 16.971716160257255, Q Loss: 8.4653902053833, Actor Loss: -33.74112415313721
Episode 958: Time: 0.03471541404724121, Total Reward: 25.673312337627124, Q Loss: 12.418587923049927, Actor Loss: -45.441986083984375
Episode 959: Time: 0.03474736213684082, Total Reward: 25.478583147696817, Q Loss: 14.250882148742676, Actor Loss: -42.840084075927734
Episode 960: Time: 0.03525805473327637, Total Reward: 25.872979376469704, Q Loss: 11.9698486328125, Actor Loss: -42.798171043395996
Episode 961: Time: 0.034798622131347656, Total Reward: 25.653218033245874, Q Loss: 13.795475244522095, Actor Loss: -48.72716522216797
Episode 962: Time: 0.034749507904052734, Total Reward: 25.6116398604711, Q Loss: 15.462438106536865, Actor Loss: -45.251519203186035
Episode 963: Time: 0.03493547439575195, Total Reward: 25.573528142667623, Q Loss: 15.628714799880981, Actor Loss: -49.624271392822266
Episode 964: Time: 0.03479599952697754, Total Reward: 25.32989477701865, Q Loss: 15.38027811050415, Actor Loss: -45.0489559173584
Episode 965: Time: 0.026128530502319336, Total Reward: 16.792174865083787, Q Loss: 10.859915018081665, Actor Loss: -32.26892375946045
Episode 966: Time: 0.05254077911376953, Total Reward: 44.693377582695304, Q Loss: 24.099037647247314, Actor Loss: -70.88435935974121
Episode 967: Time: 0.03493523597717285, Total Reward: 25.328292222902256, Q Loss: 14.651841402053833, Actor Loss: -45.3427209854126
Episode 968: Time: 0.03478503227233887, Total Reward: 25.375191496919626, Q Loss: 14.670211791992188, Actor Loss: -50.39017105102539
Episode 969: Time: 0.026458024978637695, Total Reward: 17.00014761895033, Q Loss: 12.927241802215576, Actor Loss: -36.853803634643555
Episode 970: Time: 0.026270866394042970, Total Reward: 16.87173130882828, Q Loss: 10.022401332855225, Actor Loss: -33.16962814331055

Episode 971: Time: 0.0262453556060791, Total Reward: 16.82112410001006, Q Loss: 9.369962692260742, Actor Loss: -31.25404453277588
Episode 972: Time: 0.02624988555908203, Total Reward: 16.892381442451182, Q Loss: 10.518382787704468, Actor Loss: -32.342528343200684
Episode 973: Time: 0.03536581993103027, Total Reward: 25.493131490290853, Q Loss: 14.358300685882568, Actor Loss: -44.597750663757324
Episode 974: Time: 0.026254653930664062, Total Reward: 16.9620859879874, Q Loss: 10.241503715515137, Actor Loss: -32.77998352050781
Episode 975: Time: 0.034963130950927734, Total Reward: 25.304829951696938, Q Loss: 15.481062412261963, Actor Loss: -46.430535316467285
Episode 976: Time: 0.03484773635864258, Total Reward: 25.129862147680907, Q Loss: 14.76701045036316, Actor Loss: -46.740206718444824
Episode 977: Time: 0.03478527069091797, Total Reward: 26.22320176951616, Q Loss: 15.72921371459961, Actor Loss: -44.53154945373535
Episode 978: Time: 0.034783124923706055, Total Reward: 25.20155964382104, Q Loss: 15.929287910461426, Actor Loss: -41.314321517944336
Episode 979: Time: 0.026199817657470703, Total Reward: 16.88346684315519, Q Loss: 11.881600856781006, Actor Loss: -35.44380569458008
Episode 980: Time: 0.03502821922302246, Total Reward: 25.344298713623253, Q Loss: 18.760587215423584, Actor Loss: -47.58985424041748
Episode 981: Time: 0.026170730590820312, Total Reward: 16.913038569552967, Q Loss: 12.87972354888916, Actor Loss: -32.553799629211426
Episode 982: Time: 0.03477954864501953, Total Reward: 25.383340766735955, Q Loss: 14.91271424293518, Actor Loss: -46.07367992401123
Episode 983: Time: 0.03485727310180664, Total Reward: 25.27496789601057, Q Loss: 16.668882846832275, Actor Loss: -46.29728984832764
Episode 984: Time: 0.026234865188598633, Total Reward: 16.806615312069177, Q Loss: 9.41063404083252, Actor Loss: -30.85132884979248
Episode 985: Time: 0.026170969009399414, Total Reward: 16.976883499321517, Q Loss: 12.028043508529663, Actor Loss: -36.66282272338867
Episode 986: Time: 0.0351870059967041, Total Reward: 26.07834536793701, Q Loss: 12.487171649932861, Actor Loss: -42.8570499420166
Episode 987: Time: 0.02678847312927246, Total Reward: 16.75163479796155, Q Loss: 13.005380630493164, Actor Loss: -33.71061706542969
Episode 988: Time: 0.03531050682067871, Total Reward: 25.240923523596038, Q Loss: 15.75519323348999, Actor Loss: -42.334943771362305
Episode 989: Time: 0.035033226013183594, Total Reward: 25.31860534443616, Q Loss: 16.01862668991089, Actor Loss: -44.34251880645752
Episode 990: Time: 0.026297569274902344, Total Reward: 16.825001737752547, Q Loss: 10.744718790054321, Actor Loss: -30.386152267456055
Episode 991: Time: 0.026292085647583008, Total Reward: 16.89240847250154, Q Loss: 9.964011192321777, Actor Loss: -35.40454578399658
Episode 992: Time: 0.03482317924499512, Total Reward: 25.22988673173763, Q Loss: 15.541315078735352, Actor Loss: -45.23357963562012
Episode 993: Time: 0.03476905822753906, Total Reward: 25.15968149904265, Q Loss: 14.511504173278809, Actor Loss: -47.442172050476074
Episode 994: Time: 0.03518533706665039, Total Reward: 25.338508895200498, Q Loss: 16.306551933288574, Actor Loss: -44.38507556915283
Episode 995: Time: 0.026162147521972656, Total Reward: 16.827357262775905, Q Loss: 12.121992349624634, Actor Loss: -34.926902770996094
Episode 996: Time: 0.03483176231384277, Total Reward: 25.707358178433143, Q Loss: 15.476263284683228, Actor Loss: -43.55327892303467
Episode 997: Time: 0.03473615646362305, Total Reward: 25.270527369182222, Q Loss: 14.661232948303223, Actor Loss: -45.25107288360596
Episode 998: Time: 0.03488039970397949, Total Reward: 25.274992377826923, Q Loss: 14.079719543457031, Actor Loss: -45.78525638580322

Episode 999: Time: 0.03474116325378418, Total Reward: 25.365866769037893, Q Loss: 14.843821287155151, Actor Loss: -41.40872859954834
Validation Mean: 21.321420685759325, Validation Std: 4.180266056352206
saving model
Episode 1000: Time: 0.0264585018157959, Total Reward: 16.950266509653233, Q Loss: 9.711998701095581, Actor Loss: -35.25803565979004
Episode 1001: Time: 0.03486990928649902, Total Reward: 26.22723203199654, Q Loss: 11.887871861457825, Actor Loss: -47.825599670410156
Episode 1002: Time: 0.02630472183227539, Total Reward: 16.90471109812937, Q Loss: 9.725477695465088, Actor Loss: -36.68214702606201
Episode 1003: Time: 0.03520774841308594, Total Reward: 25.80420634679417, Q Loss: 14.115695238113403, Actor Loss: -45.89804744720459
Episode 1004: Time: 0.02684497833251953, Total Reward: 16.912446117487562, Q Loss: 10.926204919815063, Actor Loss: -34.349589347839355
Episode 1005: Time: 0.03487539291381836, Total Reward: 25.17688036704866, Q Loss: 12.484917640686035, Actor Loss: -47.65079975128174
Episode 1006: Time: 0.02663278579711914, Total Reward: 16.908493055574684, Q Loss: 8.843478918075562, Actor Loss: -34.61931037902832
Episode 1007: Time: 0.03495526313781738, Total Reward: 25.43929864740139, Q Loss: 15.686672449111938, Actor Loss: -46.33220672607422
Episode 1008: Time: 0.03492593765258789, Total Reward: 25.68727885842572, Q Loss: 14.94804072380066, Actor Loss: -47.91346740722656
Episode 1009: Time: 0.02623462677001953, Total Reward: 16.92291613763106, Q Loss: 10.82707405090332, Actor Loss: -31.935270309448242
Episode 1010: Time: 0.03487992286682129, Total Reward: 26.043293289900866, Q Loss: 15.644111633300781, Actor Loss: -44.56095600128174
Episode 1011: Time: 0.03471732139587402, Total Reward: 26.013867980103882, Q Loss: 13.0906503200531, Actor Loss: -47.19157600402832
Episode 1012: Time: 0.03631305694580078, Total Reward: 26.116451376724584, Q Loss: 17.9001727104187, Actor Loss: -44.532071113586426
Episode 1013: Time: 0.05353736877441406, Total Reward: 35.529724541012385, Q Loss: 15.537642002105713, Actor Loss: -55.69071960449219
Episode 1014: Time: 0.042861223220825195, Total Reward: 26.021208890873314, Q Loss: 15.440346956253052, Actor Loss: -48.816344261169434
Episode 1015: Time: 0.11733245849609375, Total Reward: 91.36254543587592, Q Loss: 39.85314464569092, Actor Loss: -124.65470027923584
Episode 1016: Time: 0.12538719177246094, Total Reward: 100.86775903873908, Q Loss: 46.34223389625549, Actor Loss: -153.287428855896
Episode 1017: Time: 0.04329061508178711, Total Reward: 35.20195783912084, Q Loss: 18.386343717575073, Actor Loss: -59.90943241119385
Episode 1018: Time: 0.05245351791381836, Total Reward: 44.387573319679774, Q Loss: 23.614294052124023, Actor Loss: -69.28785133361816
Episode 1019: Time: 0.03474903106689453, Total Reward: 25.89003594599552, Q Loss: 15.551283359527588, Actor Loss: -52.9082145690918
Episode 1020: Time: 0.043328285217285156, Total Reward: 34.74679967920803, Q Loss: 23.819412231445312, Actor Loss: -58.63241386413574
Episode 1021: Time: 0.034881591796875, Total Reward: 26.177461199803215, Q Loss: 17.171184539794922, Actor Loss: -49.56575965881348
Episode 1022: Time: 0.03452324867248535, Total Reward: 26.28582464748734, Q Loss: 18.722023487091064, Actor Loss: -48.73817157745361
Episode 1023: Time: 0.043387651443481445, Total Reward: 35.18654908260125, Q Loss: 17.82985019683838, Actor Loss: -60.11417770385742
Episode 1024: Time: 0.0351254940032959, Total Reward: 25.768545751016052, Q Loss: 16.561599731445312, Actor Loss: -53.04126262664795
Episode 1025: Time: 0.03466296195983887, Total Reward: 25.933470814506197, Q Loss: 16.868963479995728, Actor Loss: -47.2289457321167

Episode 1026: Time: 0.02614903450012207, Total Reward: 16.970246355185093, Q Loss: 9.28496265411377, Actor Loss: -35.516953468322754
Episode 1027: Time: 0.03473210334777832, Total Reward: 25.718176751786476, Q Loss: 18.880152940750122, Actor Loss: -50.25180244445801
Episode 1028: Time: 0.0346226692199707, Total Reward: 25.093515026023436, Q Loss: 18.408689975738525, Actor Loss: -46.527835845947266
Episode 1029: Time: 0.03468608856201172, Total Reward: 25.294559708992644, Q Loss: 17.2342689037323, Actor Loss: -48.710429191589355
Episode 1030: Time: 0.02605581283569336, Total Reward: 16.967288012866508, Q Loss: 11.263639688491821, Actor Loss: -34.92661094665527
Episode 1031: Time: 0.03528714179992676, Total Reward: 25.688138762673304, Q Loss: 14.99200701713562, Actor Loss: -50.41922378540039
Episode 1032: Time: 0.03452014923095703, Total Reward: 26.032521944116098, Q Loss: 17.28881549835205, Actor Loss: -51.36327648162842
Episode 1033: Time: 0.034659385681152344, Total Reward: 25.53289188212394, Q Loss: 16.597223043441772, Actor Loss: -45.88290596008301
Episode 1034: Time: 0.03451895713806152, Total Reward: 26.04681324896023, Q Loss: 17.095889806747437, Actor Loss: -49.87754726409912
Episode 1035: Time: 0.03452897071838379, Total Reward: 25.80642890880126, Q Loss: 15.729511737823486, Actor Loss: -48.30164813995361
Episode 1036: Time: 0.034705162048339844, Total Reward: 25.29200803343666, Q Loss: 17.36150884628296, Actor Loss: -52.614455223083496
Episode 1037: Time: 0.03502535820007324, Total Reward: 25.507611252996274, Q Loss: 21.087099075317383, Actor Loss: -55.35583019256592
Episode 1038: Time: 0.03481006622314453, Total Reward: 25.319156272670963, Q Loss: 16.288877248764038, Actor Loss: -47.20340156555176
Episode 1039: Time: 0.03475141525268555, Total Reward: 26.038005023692293, Q Loss: 22.492769241333008, Actor Loss: -45.22638130187988
Episode 1040: Time: 0.034642934799194336, Total Reward: 25.689428520149217, Q Loss: 18.85664987564087, Actor Loss: -53.75496864318848
Episode 1041: Time: 0.026051044464111328, Total Reward: 16.94433061223548, Q Loss: 15.121099948883057, Actor Loss: -37.41999435424805
Episode 1042: Time: 0.034644365310668945, Total Reward: 26.02618647119092, Q Loss: 16.511305332183838, Actor Loss: -46.169718742370605
Episode 1043: Time: 0.03509688377380371, Total Reward: 25.758124557720034, Q Loss: 16.67633628845215, Actor Loss: -50.96900272369385
Episode 1044: Time: 0.03472423553466797, Total Reward: 25.481386224816042, Q Loss: 14.028652429580688, Actor Loss: -49.36738395690918
Episode 1045: Time: 0.03464221954345703, Total Reward: 25.345671030306377, Q Loss: 17.802629709243774, Actor Loss: -49.2611780166626
Episode 1046: Time: 0.03454160690307617, Total Reward: 25.33667364925526, Q Loss: 18.9437997341156, Actor Loss: -53.24105262756348
Episode 1047: Time: 0.03475499153137207, Total Reward: 25.876755155618232, Q Loss: 14.059451341629028, Actor Loss: -49.9575080871582
Episode 1048: Time: 0.034491777420043945, Total Reward: 25.390973654499955, Q Loss: 17.284488201141357, Actor Loss: -45.76541805267334
Episode 1049: Time: 0.03496980667114258, Total Reward: 25.49570692984185, Q Loss: 15.504639863967896, Actor Loss: -48.81034755706787
Episode 1050: Time: 0.034578561782836914, Total Reward: 25.73425563163747, Q Loss: 12.684855937957764, Actor Loss: -44.98164176940918
Episode 1051: Time: 0.026021957397460938, Total Reward: 16.73864371683587, Q Loss: 11.209347248077393, Actor Loss: -38.20112323760986
Episode 1052: Time: 0.0347442626953125, Total Reward: 25.35541426778012, Q Loss: 16.064043045043945, Actor Loss: -54.000956535339355
Episode 1053: Time: 0.034616947174072266, Total Reward: 25.571525776866032, Q Loss: 16.737099170684814, Actor Loss: -50.58169937133789

Episode 1054: Time: 0.03473520278930664, Total Reward: 25.203896822713475, Q Loss: 16.25115704536438, Actor Loss: -46.180484771728516
Episode 1055: Time: 0.03489947319030762, Total Reward: 25.53318235380427, Q Loss: 15.791046857833862, Actor Loss: -47.03909873962402
Episode 1056: Time: 0.03473091125488281, Total Reward: 26.298075585413546, Q Loss: 12.371453523635864, Actor Loss: -44.64197254180908
Episode 1057: Time: 0.026017427444458008, Total Reward: 17.01771127191658, Q Loss: 10.569488763809204, Actor Loss: -36.16306686401367
Episode 1058: Time: 0.02605915069580078, Total Reward: 16.937539688234725, Q Loss: 14.643279552459717, Actor Loss: -37.43346118927002
Episode 1059: Time: 0.034606218338012695, Total Reward: 25.31504477708234, Q Loss: 15.974661111831665, Actor Loss: -51.38888168334961
Episode 1060: Time: 0.034621238708496094, Total Reward: 25.229164754941003, Q Loss: 16.5548038482666, Actor Loss: -46.2670202255249
Episode 1061: Time: 0.03461313247680664, Total Reward: 25.672131012768972, Q Loss: 13.962799072265625, Actor Loss: -48.453636169433594
Episode 1062: Time: 0.035236358642578125, Total Reward: 25.722290630313594, Q Loss: 15.947871446609497, Actor Loss: -46.990882873535156
Episode 1063: Time: 0.026401996612548828, Total Reward: 16.933591725514795, Q Loss: 12.173808097839355, Actor Loss: -37.227803230285645
Episode 1064: Time: 0.03485465049743652, Total Reward: 25.280893173096462, Q Loss: 17.341997623443604, Actor Loss: -48.689048767089844
Episode 1065: Time: 0.02635931968688965, Total Reward: 16.920514029391512, Q Loss: 12.522003173828125, Actor Loss: -36.91270732879639
Episode 1066: Time: 0.034857988357543945, Total Reward: 25.768346049656504, Q Loss: 16.705145835876465, Actor Loss: -53.086039543151855
Episode 1067: Time: 0.04343438148498535, Total Reward: 34.83136239296685, Q Loss: 23.664097785949707, Actor Loss: -61.80654811859131
Episode 1068: Time: 0.03510403633117676, Total Reward: 25.235187917675024, Q Loss: 19.585871934890747, Actor Loss: -48.995314598083496
Episode 1069: Time: 0.034584999084472656, Total Reward: 25.405129249855847, Q Loss: 16.13313937187195, Actor Loss: -47.894731521606445
Episode 1070: Time: 0.026079893112182617, Total Reward: 16.964412022312146, Q Loss: 12.685867071151733, Actor Loss: -39.8900671005249
Episode 1071: Time: 0.034665822982788086, Total Reward: 25.28635037339152, Q Loss: 16.706969261169434, Actor Loss: -48.88500118255615
Episode 1072: Time: 0.02615070343017578, Total Reward: 16.898284777340017, Q Loss: 8.827274799346924, Actor Loss: -37.0613317489624
Episode 1073: Time: 0.03470897674560547, Total Reward: 25.25200519596724, Q Loss: 16.83511447906494, Actor Loss: -42.950374603271484
Episode 1074: Time: 0.03495025634765625, Total Reward: 26.27375009619659, Q Loss: 16.999257802963257, Actor Loss: -47.57771396636963
Episode 1075: Time: 0.026685476303100586, Total Reward: 16.904060872132433, Q Loss: 12.826081991195679, Actor Loss: -37.748788833618164
Episode 1076: Time: 0.03495526313781738, Total Reward: 25.22560415014676, Q Loss: 16.619059085845947, Actor Loss: -48.34885025024414
Episode 1077: Time: 0.03466057777404785, Total Reward: 25.192014304383797, Q Loss: 11.245951414108276, Actor Loss: -48.6803503036499
Episode 1078: Time: 0.026081562042236328, Total Reward: 16.980723750800244, Q Loss: 13.854733228683472, Actor Loss: -37.27426242828369
Episode 1079: Time: 0.03471207618713379, Total Reward: 25.700593104144193, Q Loss: 18.966959714889526, Actor Loss: -48.082027435302734
Episode 1080: Time: 0.03461027145385742, Total Reward: 25.584941261398406, Q Loss: 14.520175457000732, Actor Loss: -45.54335594177246
Episode 1081: Time: 0.0350801944732666, Total Reward: 26.051176938314065, Q Loss: 13.47705364227295, Actor Loss: -46.606122970581055

Episode 1082: Time: 0.03603005409240723, Total Reward: 25.428658847498284, Q Loss: 16.972982168197632, Actor Loss: -53.80610275268555
Episode 1083: Time: 0.03483891487121582, Total Reward: 25.305863113414294, Q Loss: 15.838952779769897, Actor Loss: -47.593111991882324
Episode 1084: Time: 0.03464341163635254, Total Reward: 25.970348307818952, Q Loss: 14.416074752807617, Actor Loss: -48.77495765686035
Episode 1085: Time: 0.03470206260681152, Total Reward: 25.305090834466323, Q Loss: 20.877695083618164, Actor Loss: -49.13420009613037
Episode 1086: Time: 0.026135683059692383, Total Reward: 16.939111010982977, Q Loss: 13.910122394561768, Actor Loss: -41.67720985412598
Episode 1087: Time: 0.04364418983459473, Total Reward: 35.42076148266973, Q Loss: 24.967737674713135, Actor Loss: -62.171175956726074
Episode 1088: Time: 0.043201446533203125, Total Reward: 34.89210707886366, Q Loss: 19.10701632499695, Actor Loss: -58.7014799118042
Episode 1089: Time: 0.03492307662963867, Total Reward: 25.552685720446647, Q Loss: 20.078172206878662, Actor Loss: -54.183298110961914
Episode 1090: Time: 0.04314923286437988, Total Reward: 35.28105124668627, Q Loss: 22.400246620178223, Actor Loss: -61.22746181488037
Episode 1091: Time: 0.02611994743347168, Total Reward: 16.885351300398707, Q Loss: 14.06870985031128, Actor Loss: -38.477317810058594
Episode 1092: Time: 0.03466463088989258, Total Reward: 25.248872809220284, Q Loss: 20.54304599761963, Actor Loss: -47.58008861541748
Episode 1093: Time: 0.035025596618652344, Total Reward: 26.30968152436413, Q Loss: 20.198735237121582, Actor Loss: -53.51764488220215
Episode 1094: Time: 0.034703969955444336, Total Reward: 25.40932422761, Q Loss: 18.062324047088623, Actor Loss: -48.0059814453125
Episode 1095: Time: 0.03473687171936035, Total Reward: 25.402394163730488, Q Loss: 15.030560970306396, Actor Loss: -52.79187202453613
Episode 1096: Time: 0.026124954223632812, Total Reward: 16.847879430721868, Q Loss: 16.585752964019775, Actor Loss: -36.54293441772461
Episode 1097: Time: 0.03463888168334961, Total Reward: 26.076008511668796, Q Loss: 15.463438510894775, Actor Loss: -52.34123611450195
Episode 1098: Time: 0.034792423248291016, Total Reward: 25.317213948034478, Q Loss: 18.55421781539917, Actor Loss: -47.388922691345215
Episode 1099: Time: 0.0263216495513916, Total Reward: 17.014164139759874, Q Loss: 12.450545072555542, Actor Loss: -33.17579460144043
Validation Mean: 21.580763434946178, Validation Std: 4.1623385218559585
saving model
Episode 1100: Time: 0.03491568565368652, Total Reward: 25.542806450717702, Q Loss: 14.657938241958618, Actor Loss: -49.565863609313965
Episode 1101: Time: 0.026220321655273438, Total Reward: 16.878696167501044, Q Loss: 13.04254961013794, Actor Loss: -39.056227684020996
Episode 1102: Time: 0.03482627868652344, Total Reward: 25.551855610539572, Q Loss: 16.094496488571167, Actor Loss: -47.58096408843994
Episode 1103: Time: 0.026146888732910156, Total Reward: 16.943076812980845, Q Loss: 12.452118635177612, Actor Loss: -37.529892921447754
Episode 1104: Time: 0.026072978973388672, Total Reward: 17.038663041858403, Q Loss: 16.733752250671387, Actor Loss: -34.69372844696045
Episode 1105: Time: 0.03467702865600586, Total Reward: 25.10161595898958, Q Loss: 15.51746940612793, Actor Loss: -45.514424324035645
Episode 1106: Time: 0.035305023193359375, Total Reward: 25.8062302148499, Q Loss: 18.732422351837158, Actor Loss: -50.13645076751709
Episode 1107: Time: 0.03459525108337402, Total Reward: 25.60066374156739, Q Loss: 20.69092035293579, Actor Loss: -45.608747482299805
Episode 1108: Time: 0.03470873832702637, Total Reward: 26.18144296349715, Q Loss: 18.61070442199707, Actor Loss: -45.291348457336426

Episode 1109: Time: 0.03469347953796387, Total Reward: 25.26332882035485, Q Loss: 19.396801710128784, Actor Loss: -54.96853160858154
Episode 1110: Time: 0.026231050491333008, Total Reward: 16.889730283528106, Q Loss: 10.5744309425354, Actor Loss: -35.129066467285156
Episode 1111: Time: 0.034731149673461914, Total Reward: 25.272402297568267, Q Loss: 17.881397247314453, Actor Loss: -46.78495979309082
Episode 1112: Time: 0.02611684799194336, Total Reward: 16.876075381352006, Q Loss: 13.7709379196167, Actor Loss: -37.70024394989014
Episode 1113: Time: 0.03528642654418945, Total Reward: 25.76269737700257, Q Loss: 17.195058584213257, Actor Loss: -50.60465717315674
Episode 1114: Time: 0.03486061096191406, Total Reward: 25.671807942093682, Q Loss: 23.067652225494385, Actor Loss: -46.99634838104248
Episode 1115: Time: 0.034859657287597656, Total Reward: 25.73876545574652, Q Loss: 14.792264699935913, Actor Loss: -44.89366340637207
Episode 1116: Time: 0.03467559814453125, Total Reward: 26.211205929467624, Q Loss: 16.233717918395996, Actor Loss: -44.259063720703125
Episode 1117: Time: 0.03471183776855469, Total Reward: 25.368876650911112, Q Loss: 15.128898620605469, Actor Loss: -47.494436264038086
Episode 1118: Time: 0.034835100173950195, Total Reward: 25.12527194616922, Q Loss: 18.693034172058105, Actor Loss: -49.47617435455322
Episode 1119: Time: 0.035106658935546875, Total Reward: 25.6893084297443, Q Loss: 15.977132558822632, Actor Loss: -52.7988395690918
Episode 1120: Time: 0.026259422302246094, Total Reward: 16.90999621980472, Q Loss: 13.617920398712158, Actor Loss: -38.34458827972412
Episode 1121: Time: 0.034737586975097656, Total Reward: 25.8373718978179, Q Loss: 18.05980086326599, Actor Loss: -50.725046157836914
Episode 1122: Time: 0.03475356101989746, Total Reward: 25.306564152967173, Q Loss: 18.46387529373169, Actor Loss: -51.78500270843506
Episode 1123: Time: 0.03487277030944824, Total Reward: 25.393634965072618, Q Loss: 22.808515548706055, Actor Loss: -48.893534660339355
Episode 1124: Time: 0.03468775749206543, Total Reward: 25.8943219288798, Q Loss: 17.643425703048706, Actor Loss: -48.19253349304199
Episode 1125: Time: 0.035143375396728516, Total Reward: 25.322864438433985, Q Loss: 19.337472200393677, Actor Loss: -47.95828437805176
Episode 1126: Time: 0.02610945701599121, Total Reward: 16.78328093801172, Q Loss: 13.752985954284668, Actor Loss: -31.168339729309082
Episode 1127: Time: 0.03523850440979004, Total Reward: 25.646646917060657, Q Loss: 21.22385263442993, Actor Loss: -49.85699653625488
Episode 1128: Time: 0.034967899322509766, Total Reward: 26.063139002780556, Q Loss: 23.18427085876465, Actor Loss: -47.151784896850586
Episode 1129: Time: 0.026175260543823242, Total Reward: 16.811845601627162, Q Loss: 11.718497276306152, Actor Loss: -38.42622470855713
Episode 1130: Time: 0.03486514091491699, Total Reward: 25.26168930465711, Q Loss: 17.22008752822876, Actor Loss: -45.49914741516113
Episode 1131: Time: 0.034644126892089844, Total Reward: 25.620912745064064, Q Loss: 20.192815899848938, Actor Loss: -48.80029582977295
Episode 1132: Time: 0.02658390998840332, Total Reward: 16.90045443366865, Q Loss: 10.286570072174072, Actor Loss: -38.41360282897949
Episode 1133: Time: 0.034827470779418945, Total Reward: 25.577272736414198, Q Loss: 19.39636492729187, Actor Loss: -47.976430892944336
Episode 1134: Time: 0.03472185134887695, Total Reward: 25.59727262552846, Q Loss: 21.124512434005737, Actor Loss: -52.998414039611816
Episode 1135: Time: 0.034835100173950195, Total Reward: 25.506377437293107, Q Loss: 12.713719844818115, Actor Loss: -44.27833652496338
Episode 1136: Time: 0.03476309776306152, Total Reward: 25.234926699194585, Q Loss: 21.45097255706787, Actor Loss: -44.560391426086426

Episode 1137: Time: 0.03477644920349121, Total Reward: 25.485561779165806, Q Loss: 22.221351146697998, Actor Loss: -46.75585079193115
Episode 1138: Time: 0.03511667251586914, Total Reward: 25.268449176792654, Q Loss: 17.603365898132324, Actor Loss: -45.50863742828369
Episode 1139: Time: 0.034769535064697266, Total Reward: 25.3596972761371, Q Loss: 21.942896842956543, Actor Loss: -52.064913749694824
Episode 1140: Time: 0.03499269485473633, Total Reward: 25.700161002354164, Q Loss: 18.133558988571167, Actor Loss: -47.65252113342285
Episode 1141: Time: 0.03476309776306152, Total Reward: 25.299828689390257, Q Loss: 19.587578296661377, Actor Loss: -50.06305408477783
Episode 1142: Time: 0.026177406311035156, Total Reward: 16.855490083124824, Q Loss: 13.710079669952393, Actor Loss: -36.945823669433594
Episode 1143: Time: 0.02610492706298828, Total Reward: 16.891999438455006, Q Loss: 14.588298559188843, Actor Loss: -35.98533248901367
Episode 1144: Time: 0.03457784652709961, Total Reward: 25.766197577710365, Q Loss: 19.65785264968872, Actor Loss: -49.18021869659424
Episode 1145: Time: 0.03524017333984375, Total Reward: 25.371225643092544, Q Loss: 17.04360032081604, Actor Loss: -49.97086143493652
Episode 1146: Time: 0.034920692443847656, Total Reward: 25.79670442411341, Q Loss: 16.31387996673584, Actor Loss: -46.692975997924805
Episode 1147: Time: 0.03494834899902344, Total Reward: 25.27849645287664, Q Loss: 15.916895151138306, Actor Loss: -51.909939765930176
Episode 1148: Time: 0.03488492965698242, Total Reward: 25.51109780606846, Q Loss: 16.014243841171265, Actor Loss: -50.00327491760254
Episode 1149: Time: 0.043440818786621094, Total Reward: 35.057483693148974, Q Loss: 20.13775944709778, Actor Loss: -58.50751304626465
Episode 1150: Time: 0.03500103950500488, Total Reward: 25.244756883732542, Q Loss: 20.019824028015137, Actor Loss: -51.46101379394531
Episode 1151: Time: 0.035134315490722656, Total Reward: 25.49086232373932, Q Loss: 25.803755283355713, Actor Loss: -53.56164741516113
Episode 1152: Time: 0.03492164611816406, Total Reward: 25.55735151081585, Q Loss: 16.597671031951904, Actor Loss: -51.88716983795166
Episode 1153: Time: 0.035144805908203125, Total Reward: 25.255802231910778, Q Loss: 19.68092966079712, Actor Loss: -48.00870418548584
Episode 1154: Time: 0.03496503829956055, Total Reward: 25.504591171646528, Q Loss: 16.91105604171753, Actor Loss: -50.473609924316406
Episode 1155: Time: 0.035125732421875, Total Reward: 25.48810696466616, Q Loss: 16.51044726371765, Actor Loss: -46.52969837188721
Episode 1156: Time: 0.03513479232788086, Total Reward: 25.15528742383935, Q Loss: 15.91681432723999, Actor Loss: -46.605974197387695
Episode 1157: Time: 0.026604175567626953, Total Reward: 16.944587573881414, Q Loss: 14.17118215560913, Actor Loss: -37.68189334869385
Episode 1158: Time: 0.035138845443725586, Total Reward: 25.209908689665237, Q Loss: 23.866080284118652, Actor Loss: -45.143073081970215
Episode 1159: Time: 0.0263521671295166, Total Reward: 16.794322718212065, Q Loss: 10.40236747264862, Actor Loss: -35.354990005493164
Episode 1160: Time: 0.03510689735412598, Total Reward: 25.275563319333997, Q Loss: 22.739813327789307, Actor Loss: -51.88807964324951
Episode 1161: Time: 0.026444435119628906, Total Reward: 16.969538107186803, Q Loss: 13.806055545806885, Actor Loss: -36.995161056518555
Episode 1162: Time: 0.035111427307128906, Total Reward: 25.830931805587674, Q Loss: 19.812483310699463, Actor Loss: -50.332956314086914
Episode 1163: Time: 0.03509354591369629, Total Reward: 25.54284906579509, Q Loss: 19.710225582122803, Actor Loss: -48.6633243560791
Episode 1164: Time: 0.03549075126647949, Total Reward: 25.208093690038012, Q Loss: 18.772288556086731, Actor Loss: -46.277469635009766

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Episode 1165: Time: 0.026350975036621094, Total Reward: 16.963781614525786,
Q Loss: 11.589369058609009, Actor Loss: -36.647708892822266
Episode 1166: Time: 0.03506898880004883, Total Reward: 25.29954732199087, Q
Loss: 19.492038011550903, Actor Loss: -48.90393352508545
Episode 1167: Time: 0.035069942474365234, Total Reward: 25.849253602848933,
Q Loss: 16.91301202774048, Actor Loss: -47.27488136291504
Episode 1168: Time: 0.026485681533813477, Total Reward: 16.940648398901786,
Q Loss: 10.951663494110107, Actor Loss: -37.88270854949951
Episode 1169: Time: 0.03563809394836426, Total Reward: 25.19431375022304, Q
Loss: 16.479518175125122, Actor Loss: -47.48701190948486
Episode 1170: Time: 0.035063743591308594, Total Reward: 25.64685742854606, Q
Loss: 16.915731191635132, Actor Loss: -45.43431377410889
Episode 1171: Time: 0.03552103042602539, Total Reward: 25.539764974131653, Q
Loss: 17.18308162689209, Actor Loss: -46.22913360595703
Episode 1172: Time: 0.03521919250488281, Total Reward: 25.278915200012158, Q
Loss: 18.615259408950806, Actor Loss: -51.30037498474121
Episode 1173: Time: 0.035150766372680664, Total Reward: 25.327002206661856,
Q Loss: 15.646241664886475, Actor Loss: -47.680317878723145
Episode 1174: Time: 0.03503584861755371, Total Reward: 25.452616731820612, Q
Loss: 15.721209049224854, Actor Loss: -49.577674865722656
Episode 1175: Time: 0.02646017074584961, Total Reward: 16.888326836558903, Q
Loss: 14.041260004043579, Actor Loss: -33.000404357910156
Episode 1176: Time: 0.03500056266784668, Total Reward: 25.431376392570147, Q
Loss: 21.133048057556152, Actor Loss: -51.188918113708496
Episode 1177: Time: 0.0355377197265625, Total Reward: 25.397653843932726, Q
Loss: 17.604925394058228, Actor Loss: -47.79037284851074
Episode 1178: Time: 0.02653336524963379, Total Reward: 16.958186309077586, Q
Loss: 12.15792989730835, Actor Loss: -32.377169609069824
Episode 1179: Time: 0.03514504432678223, Total Reward: 25.17333117857526, Q
Loss: 15.885662078857422, Actor Loss: -50.50743579864502
Episode 1180: Time: 0.02639937400817871, Total Reward: 16.857120354943742, Q
Loss: 14.07569932937622, Actor Loss: -37.920494079589844
Episode 1181: Time: 0.035100460052490234, Total Reward: 25.293383801029847,
Q Loss: 15.881121635437012, Actor Loss: -46.49641704559326
Episode 1182: Time: 0.035083770751953125, Total Reward: 25.60945467387437, Q
Loss: 16.168529748916626, Actor Loss: -46.51692199707031
Episode 1183: Time: 0.035048723220825195, Total Reward: 25.302761397905087,
Q Loss: 16.918036460876465, Actor Loss: -48.90056610107422
Episode 1184: Time: 0.02694535255432129, Total Reward: 16.90182451021727, Q
Loss: 14.598103046417236, Actor Loss: -36.69938659667969
Episode 1185: Time: 0.03518414497375488, Total Reward: 25.311788234558396, Q
Loss: 19.24409294128418, Actor Loss: -52.726152420043945
Episode 1186: Time: 0.03518104553222656, Total Reward: 25.37711259074968, Q
Loss: 19.85210371017456, Actor Loss: -48.09408950805664
Episode 1187: Time: 0.035117387771606445, Total Reward: 25.83877724274661, Q
Loss: 20.255135536193848, Actor Loss: -45.33632278442383
Episode 1188: Time: 0.035214900970458984, Total Reward: 25.218952330132545,
Q Loss: 19.92588758468628, Actor Loss: -51.61735248565674
Episode 1189: Time: 0.035228729248046875, Total Reward: 25.213738051677865,
Q Loss: 21.424312591552734, Actor Loss: -53.408775329589844
Episode 1190: Time: 0.027019023895263672, Total Reward: 16.778756185741184,
Q Loss: 16.121398448944092, Actor Loss: -36.55919170379639
Episode 1191: Time: 0.03550291061401367, Total Reward: 25.97711833701069, Q
Loss: 23.29899311065674, Actor Loss: -50.392032623291016
Episode 1192: Time: 0.03514385223388672, Total Reward: 26.228882204420687, Q
Loss: 21.917510509490967, Actor Loss: -46.19864749908447
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Episode 1193: Time: 0.02698063850402832, Total Reward: 16.882378247962173, Q Loss: 18.395031929016113, Actor Loss: -35.232380867004395
Episode 1194: Time: 0.035634517669677734, Total Reward: 25.27748733248091, Q Loss: 20.092790126800537, Actor Loss: -53.267988204956055
Episode 1195: Time: 0.035392045974731445, Total Reward: 25.987116040183455, Q Loss: 24.135409832000732, Actor Loss: -47.94626712799072
Episode 1196: Time: 0.03580522537231445, Total Reward: 25.42513269215138, Q Loss: 22.423445224761963, Actor Loss: -50.25685977935791
Episode 1197: Time: 0.03531193733215332, Total Reward: 25.215753974563192, Q Loss: 19.323561668395996, Actor Loss: -47.75708198547363
Episode 1198: Time: 0.03533005714416504, Total Reward: 25.60677116875046, Q Loss: 19.05012035369873, Actor Loss: -49.04716968536377
Episode 1199: Time: 0.035260677337646484, Total Reward: 25.248206201162024, Q Loss: 16.16791009902954, Actor Loss: -49.80820655822754
Validation Mean: 21.06701463308918, Validation Std: 4.173917073718467
saving model
Episode 1200: Time: 0.02695322036743164, Total Reward: 16.92805213826799, Q Loss: 15.73248815536499, Actor Loss: -32.908183097839355
Episode 1201: Time: 0.03531670570373535, Total Reward: 25.61759527103988, Q Loss: 21.182037830352783, Actor Loss: -48.7114315032959
Episode 1202: Time: 0.03534126281738281, Total Reward: 25.47420508063695, Q Loss: 20.73838710784912, Actor Loss: -50.9638671875
Episode 1203: Time: 0.04407143592834473, Total Reward: 34.96824578114632, Q Loss: 27.57524013519287, Actor Loss: -62.3121280670166
Episode 1204: Time: 0.035475730895996094, Total Reward: 25.330020212418237, Q Loss: 24.923422813415527, Actor Loss: -53.22439479827881
Episode 1205: Time: 0.027252912521362305, Total Reward: 16.964861922137835, Q Loss: 14.052649974822998, Actor Loss: -34.6888370513916
Episode 1206: Time: 0.035413265228271484, Total Reward: 25.799027460015523, Q Loss: 20.411987781524658, Actor Loss: -48.9739351272583
Episode 1207: Time: 0.03577566146850586, Total Reward: 25.389536554164476, Q Loss: 24.082425594329834, Actor Loss: -45.899362564086914
Episode 1208: Time: 0.03557300567626953, Total Reward: 25.329925089587547, Q Loss: 20.622373580932617, Actor Loss: -46.56261730194092
Episode 1209: Time: 0.03549313545227051, Total Reward: 25.419124433275748, Q Loss: 23.43235683441162, Actor Loss: -54.513526916503906
Episode 1210: Time: 0.026863574981689453, Total Reward: 16.97017088424747, Q Loss: 17.770498752593994, Actor Loss: -35.57571029663086
Episode 1211: Time: 0.035848140716552734, Total Reward: 25.24185373427698, Q Loss: 19.483519792556763, Actor Loss: -44.38455295562744
Episode 1212: Time: 0.03843879699707031, Total Reward: 25.601813849875075, Q Loss: 22.529420375823975, Actor Loss: -46.7120885848999
Episode 1213: Time: 0.03545784950256348, Total Reward: 25.39167760873902, Q Loss: 22.12884283065796, Actor Loss: -48.79980182647705
Episode 1214: Time: 0.03548288345336914, Total Reward: 25.123926946418006, Q Loss: 22.119460105895996, Actor Loss: -48.53225040435791
Episode 1215: Time: 0.026618719100952215, Total Reward: 16.910614531150383, Q Loss: 12.456220388412476, Actor Loss: -36.4783935546875
Episode 1216: Time: 0.03542733192443848, Total Reward: 25.511319357365114, Q Loss: 19.507750749588013, Actor Loss: -48.13304424285889
Episode 1217: Time: 0.035809993743896484, Total Reward: 25.292562748678733, Q Loss: 20.97309970855713, Actor Loss: -48.378082275390625
Episode 1218: Time: 0.02670741081237793, Total Reward: 16.92820804505557, Q Loss: 20.350094318389893, Actor Loss: -34.86301326751709
Episode 1219: Time: 0.026897907257080078, Total Reward: 16.92659352879796, Q Loss: 15.03880500793457, Actor Loss: -39.37897872924805

Episode 1220: Time: 0.04105782508850098, Total Reward: 25.662497358097163, Q Loss: 17.928704261779785, Actor Loss: -50.51516246795654
Episode 1221: Time: 0.043079376220703125, Total Reward: 25.212395396965288, Q Loss: 21.019712924957275, Actor Loss: -51.36182689666748
Episode 1222: Time: 0.026907920837402344, Total Reward: 16.917167178370498, Q Loss: 12.833111047744751, Actor Loss: -35.45527458190918
Episode 1223: Time: 0.026691198348999023, Total Reward: 16.96875436190906, Q Loss: 11.600507259368896, Actor Loss: -37.016737937927246
Episode 1224: Time: 0.035971641540527344, Total Reward: 25.223157958999018, Q Loss: 21.881126403808594, Actor Loss: -46.9923791885376
Episode 1225: Time: 0.03531026840209961, Total Reward: 25.25416249624212, Q Loss: 20.028366088867188, Actor Loss: -50.60708999633789
Episode 1226: Time: 0.026473045349121094, Total Reward: 16.940460961429856, Q Loss: 8.936824560165405, Actor Loss: -32.17896366119385
Episode 1227: Time: 0.035227298736572266, Total Reward: 25.81285040179685, Q Loss: 18.248180866241455, Actor Loss: -45.22013187408447
Episode 1228: Time: 0.035230398178100586, Total Reward: 25.339900436340848, Q Loss: 22.12789487838745, Actor Loss: -49.95945072174072
Episode 1229: Time: 0.03507041931152344, Total Reward: 25.46649330014723, Q Loss: 14.876987934112549, Actor Loss: -43.68745231628418
Episode 1230: Time: 0.03560066223144531, Total Reward: 25.66560953189181, Q Loss: 25.274359703063965, Actor Loss: -47.61851501464844
Episode 1231: Time: 0.03514742851257324, Total Reward: 25.32837729244716, Q Loss: 24.725497245788574, Actor Loss: -55.43303966522217
Episode 1232: Time: 0.026327133178710938, Total Reward: 16.920281869708454, Q Loss: 16.122138023376465, Actor Loss: -35.79072284698486
Episode 1233: Time: 0.03511190414428711, Total Reward: 25.914533713545662, Q Loss: 22.936787843704224, Actor Loss: -53.633541107177734
Episode 1234: Time: 0.035166263580322266, Total Reward: 25.49700046008902, Q Loss: 15.835263729095459, Actor Loss: -49.15790367126465
Episode 1235: Time: 0.035089969635009766, Total Reward: 25.484629934962992, Q Loss: 20.549445390701294, Actor Loss: -51.16795253753662
Episode 1236: Time: 0.035264015197753906, Total Reward: 25.387639535172905, Q Loss: 26.736146211624146, Actor Loss: -45.937973976135254
Episode 1237: Time: 0.03510570526123047, Total Reward: 25.460970088081332, Q Loss: 18.343156814575195, Actor Loss: -46.62593746185303
Episode 1238: Time: 0.026441574096679688, Total Reward: 16.863505113475654, Q Loss: 13.445688962936401, Actor Loss: -34.008100509643555
Episode 1239: Time: 0.026330232620239258, Total Reward: 16.94583266038211, Q Loss: 12.181855201721191, Actor Loss: -36.7028226852417
Episode 1240: Time: 0.0350499153137207, Total Reward: 25.89402420287218, Q Loss: 19.45216464996338, Actor Loss: -46.82443332672119
Episode 1241: Time: 0.035112619400024414, Total Reward: 25.457304375422382, Q Loss: 23.876210689544678, Actor Loss: -51.24470806121826
Episode 1242: Time: 0.03506183624267578, Total Reward: 25.491896992194167, Q Loss: 24.875349760055542, Actor Loss: -44.82640361785889
Episode 1243: Time: 0.035918474197387695, Total Reward: 25.55524883313433, Q Loss: 22.42316699028015, Actor Loss: -47.23354721069336
Episode 1244: Time: 0.02651357650756836, Total Reward: 16.9053828357552, Q Loss: 15.57699966430664, Actor Loss: -36.84884834289551
Episode 1245: Time: 0.02631831169128418, Total Reward: 16.902172303686896, Q Loss: 18.03384828567505, Actor Loss: -36.425113677978516
Episode 1246: Time: 0.03504228591918945, Total Reward: 25.905876827902127, Q Loss: 22.50733518600464, Actor Loss: -52.510863304138184
Episode 1247: Time: 0.035047054290771484, Total Reward: 25.208348561580234, Q Loss: 16.947441577911377, Actor Loss: -46.70221424102783

Episode 1248: Time: 0.0351109504699707, Total Reward: 25.716277454215522, Q Loss: 20.549006938934326, Actor Loss: -49.962074279785156
Episode 1249: Time: 0.026526212692260742, Total Reward: 16.796032502727968, Q Loss: 14.606911182403564, Actor Loss: -35.22027111053467
Episode 1250: Time: 0.03994393348693848, Total Reward: 25.45026737342399, Q Loss: 21.13811683654785, Actor Loss: -47.72953796386719
Episode 1251: Time: 0.03605532646179199, Total Reward: 25.246045513002617, Q Loss: 20.067143440246582, Actor Loss: -44.42191696166992
Episode 1252: Time: 0.03551506996154785, Total Reward: 25.188141931908284, Q Loss: 18.456103086471558, Actor Loss: -48.39858436584473
Episode 1253: Time: 0.03541159629821777, Total Reward: 25.830836368398227, Q Loss: 18.521531343460083, Actor Loss: -48.785831451416016
Episode 1254: Time: 0.03523850440979004, Total Reward: 25.17010889685326, Q Loss: 18.90744924545288, Actor Loss: -47.7672643661499
Episode 1255: Time: 0.026433467864990234, Total Reward: 16.85415562440366, Q Loss: 16.67034387588501, Actor Loss: -36.35977077484131
Episode 1256: Time: 0.03575897216796875, Total Reward: 25.455577234842174, Q Loss: 17.969271183013916, Actor Loss: -47.97737503051758
Episode 1257: Time: 0.03521847724914551, Total Reward: 25.55257223145232, Q Loss: 25.228538990020752, Actor Loss: -52.26682758331299
Episode 1258: Time: 0.03531670570373535, Total Reward: 25.160389868659465, Q Loss: 19.14678955078125, Actor Loss: -46.37677192687988
Episode 1259: Time: 0.02634406089782715, Total Reward: 16.911567554893036, Q Loss: 17.158133029937744, Actor Loss: -35.08413791656494
Episode 1260: Time: 0.034989356994628906, Total Reward: 25.519533821285304, Q Loss: 17.512281894683838, Actor Loss: -46.99679946899414
Episode 1261: Time: 0.02642059326171875, Total Reward: 16.87732167230783, Q Loss: 16.858963012695312, Actor Loss: -35.340572357177734
Episode 1262: Time: 0.034941673278808594, Total Reward: 25.227701409324936, Q Loss: 23.2666974067688, Actor Loss: -46.631192207336426
Episode 1263: Time: 0.0355839729309082, Total Reward: 25.57282815117322, Q Loss: 24.104553699493408, Actor Loss: -48.87284469604492
Episode 1264: Time: 0.03513026237487793, Total Reward: 26.10871505959007, Q Loss: 24.1961669921875, Actor Loss: -49.1867151260376
Episode 1265: Time: 0.026475906372070312, Total Reward: 16.931614152708736, Q Loss: 13.025770664215088, Actor Loss: -36.25448226928711
Episode 1266: Time: 0.02640056610107422, Total Reward: 16.937533165213598, Q Loss: 15.35278868675232, Actor Loss: -35.42356204986572
Episode 1267: Time: 0.03511524200439453, Total Reward: 25.513809387324738, Q Loss: 22.612860679626465, Actor Loss: -46.722289085388184
Episode 1268: Time: 0.03507184982299805, Total Reward: 25.343549881580547, Q Loss: 18.094945907592773, Actor Loss: -47.577566146850586
Episode 1269: Time: 0.026378870010375977, Total Reward: 16.95806487329151, Q Loss: 15.465337753295898, Actor Loss: -38.29545974731445
Episode 1270: Time: 0.03588747978210449, Total Reward: 25.261485064251282, Q Loss: 15.352994680404663, Actor Loss: -49.197110176086426
Episode 1271: Time: 0.026442527770996094, Total Reward: 16.952385808783962, Q Loss: 17.655380725860596, Actor Loss: -38.59839916229248
Episode 1272: Time: 0.03515005111694336, Total Reward: 25.824186989249952, Q Loss: 15.625730276107788, Actor Loss: -45.32756042480469
Episode 1273: Time: 0.03527545928955078, Total Reward: 25.57331176968989, Q Loss: 23.23338508605957, Actor Loss: -52.16635608673096
Episode 1274: Time: 0.03514504432678223, Total Reward: 25.30855285235282, Q Loss: 16.71543836593628, Actor Loss: -46.417043685913086
Episode 1275: Time: 0.03534889221191406, Total Reward: 25.323958544669267, Q Loss: 17.850565195083618, Actor Loss: -44.094177724609375

Episode 1276: Time: 0.03577780723571777, Total Reward: 25.727593264526348, Q Loss: 19.20396876335144, Actor Loss: -48.597755432128906
Episode 1277: Time: 0.03512859344482422, Total Reward: 25.153233659500017, Q Loss: 16.509475469589233, Actor Loss: -43.58003330230713
Episode 1278: Time: 0.035083770751953125, Total Reward: 25.256617718473866, Q Loss: 20.464592933654785, Actor Loss: -47.456708908081055
Episode 1279: Time: 0.03524899482727051, Total Reward: 25.3770352657574, Q Loss: 20.404359579086304, Actor Loss: -49.791032791137695
Episode 1280: Time: 0.03510642051696777, Total Reward: 25.298867039959227, Q Loss: 13.255802154541016, Actor Loss: -46.9556245803833
Episode 1281: Time: 0.03539109230041504, Total Reward: 25.523712750619072, Q Loss: 21.65415596961975, Actor Loss: -46.27768611907959
Episode 1282: Time: 0.0355830192565918, Total Reward: 25.83590285420439, Q Loss: 22.136387586593628, Actor Loss: -54.02084732055664
Episode 1283: Time: 0.035253286361694336, Total Reward: 25.31225479367954, Q Loss: 16.816866636276245, Actor Loss: -46.35843372344971
Episode 1284: Time: 0.03528237342834473, Total Reward: 25.815427493010542, Q Loss: 25.451547145843506, Actor Loss: -52.1034574508667
Episode 1285: Time: 0.0352015495300293, Total Reward: 25.535062552860012, Q Loss: 24.852078914642334, Actor Loss: -50.79204273223877
Episode 1286: Time: 0.035115718841552734, Total Reward: 26.023423030063512, Q Loss: 18.030524015426636, Actor Loss: -42.789560317993164
Episode 1287: Time: 0.026401519775390625, Total Reward: 16.87065831230386, Q Loss: 10.322412014007568, Actor Loss: -32.86491012573242
Episode 1288: Time: 0.035576820373535156, Total Reward: 25.38810360656229, Q Loss: 19.76987075805664, Actor Loss: -47.42089557647705
Episode 1289: Time: 0.035102128982543945, Total Reward: 25.354714578119978, Q Loss: 12.55279803276062, Actor Loss: -43.362464904785156
Episode 1290: Time: 0.0264434814453125, Total Reward: 16.95702428093468, Q Loss: 12.430574417114258, Actor Loss: -37.27952575683594
Episode 1291: Time: 0.0352017879486084, Total Reward: 25.636828477079945, Q Loss: 20.61530113220215, Actor Loss: -48.796424865722656
Episode 1292: Time: 0.035004615783691406, Total Reward: 25.178769945986495, Q Loss: 21.896709442138672, Actor Loss: -48.017818450927734
Episode 1293: Time: 0.044133663177490234, Total Reward: 35.08762657975773, Q Loss: 29.33087682723999, Actor Loss: -59.7492618560791
Episode 1294: Time: 0.03877830505371094, Total Reward: 25.535480411609697, Q Loss: 20.647793769836426, Actor Loss: -49.080772399902344
Episode 1295: Time: 0.0323796272277832, Total Reward: 16.82636311975456, Q Loss: 14.001325130462646, Actor Loss: -35.7830171585083
Episode 1296: Time: 0.03243541717529297, Total Reward: 16.872298268391944, Q Loss: 12.919130563735962, Actor Loss: -38.647732734680176
Episode 1297: Time: 0.0430607795715332, Total Reward: 25.21826305645472, Q Loss: 14.839619874954224, Actor Loss: -51.68666076660156
Episode 1298: Time: 0.035904645919799805, Total Reward: 25.36914881300912, Q Loss: 24.599660396575928, Actor Loss: -49.21763610839844
Episode 1299: Time: 0.02627873420715332, Total Reward: 16.916242492452866, Q Loss: 15.996287822723389, Actor Loss: -36.814229011535645
Validation Mean: 20.903820415283075, Validation Std: 4.174494888563195
saving model
Episode 1300: Time: 0.0352330207824707, Total Reward: 25.82502522479292, Q Loss: 17.48432946205139, Actor Loss: -46.08003520965576
Episode 1301: Time: 0.035150766372680664, Total Reward: 25.483535019841025, Q Loss: 16.112656116485596, Actor Loss: -48.21912670135498
Episode 1302: Time: 0.026419878005981445, Total Reward: 16.878026719778937, Q Loss: 13.035895824432373, Actor Loss: -38.18978500366211

Episode 1303: Time: 0.02635478973388672, Total Reward: 16.848108154526678, Q Loss: 10.475382328033447, Actor Loss: -31.839645385742188
Episode 1304: Time: 0.034983158111572266, Total Reward: 25.398519373094157, Q Loss: 16.992055892944336, Actor Loss: -47.09397888183594
Episode 1305: Time: 0.027219057083129883, Total Reward: 16.87090399689324, Q Loss: 17.161839246749878, Actor Loss: -39.11607646942139
Episode 1306: Time: 0.03560066223144531, Total Reward: 25.55050262771286, Q Loss: 20.59334087371826, Actor Loss: -48.298644065856934
Episode 1307: Time: 0.026457786560058594, Total Reward: 16.82868312923031, Q Loss: 15.352750301361084, Actor Loss: -38.3918514251709
Episode 1308: Time: 0.0263822078704834, Total Reward: 16.97009562900603, Q Loss: 13.758696794509888, Actor Loss: -34.51603126525879
Episode 1309: Time: 0.035019636154174805, Total Reward: 25.3406532427824, Q Loss: 19.50437593460083, Actor Loss: -48.42878437042236
Episode 1310: Time: 0.03522658348083496, Total Reward: 25.17233529223587, Q Loss: 20.154805183410645, Actor Loss: -45.258596420288086
Episode 1311: Time: 0.035068511962890625, Total Reward: 25.360015801781287, Q Loss: 15.369763135910034, Actor Loss: -44.100162506103516
Episode 1312: Time: 0.03489494323730469, Total Reward: 25.537062250820437, Q Loss: 21.537129163742065, Actor Loss: -51.6204137802124
Episode 1313: Time: 0.0352940559387207, Total Reward: 25.903152558411907, Q Loss: 27.351369857788086, Actor Loss: -47.15480613708496
Episode 1314: Time: 0.026329517364501953, Total Reward: 16.978085048383253, Q Loss: 15.551324367523193, Actor Loss: -34.55961799621582
Episode 1315: Time: 0.03496956825256348, Total Reward: 25.858167344937, Q Loss: 22.227219104766846, Actor Loss: -52.91632652282715
Episode 1316: Time: 0.02625727653503418, Total Reward: 16.866864822748393, Q Loss: 17.580476760864258, Actor Loss: -35.36017322540283
Episode 1317: Time: 0.03491473197937012, Total Reward: 25.351729865538513, Q Loss: 14.695475339889526, Actor Loss: -42.521230697631836
Episode 1318: Time: 0.03498029708862305, Total Reward: 25.330656175818223, Q Loss: 20.78131890296936, Actor Loss: -47.496209144592285
Episode 1319: Time: 0.02628326416015625, Total Reward: 16.837105831401956, Q Loss: 15.351709365844727, Actor Loss: -36.76658535003662
Episode 1320: Time: 0.026943683624267578, Total Reward: 16.97703572146938, Q Loss: 18.55534553527832, Actor Loss: -38.80256175994873
Episode 1321: Time: 0.02635049819946289, Total Reward: 16.920943586846793, Q Loss: 12.70924997329712, Actor Loss: -35.95957660675049
Episode 1322: Time: 0.02635979652404785, Total Reward: 16.873678930219214, Q Loss: 19.587695360183716, Actor Loss: -36.68497848510742
Episode 1323: Time: 0.035120248794555664, Total Reward: 25.562097497038824, Q Loss: 19.41060519218445, Actor Loss: -48.65701389312744
Episode 1324: Time: 0.03503608703613281, Total Reward: 25.161662155807676, Q Loss: 27.86329174041748, Actor Loss: -49.70924949645996
Episode 1325: Time: 0.03490018844604492, Total Reward: 25.63277810931803, Q Loss: 20.94867467880249, Actor Loss: -47.709126472473145
Episode 1326: Time: 0.03545689582824707, Total Reward: 25.616767010649447, Q Loss: 20.364530563354492, Actor Loss: -46.79630470275879
Episode 1327: Time: 0.026919126510620117, Total Reward: 16.88199563274118, Q Loss: 14.641494274139404, Actor Loss: -38.09729194641113
Episode 1328: Time: 0.03495955467224121, Total Reward: 25.31411018936843, Q Loss: 16.949649333953857, Actor Loss: -44.701497077941895
Episode 1329: Time: 0.02624964714050293, Total Reward: 16.893858132716602, Q Loss: 15.334308862686157, Actor Loss: -38.83356285095215
Episode 1330: Time: 0.03497052192687988, Total Reward: 25.889073768619028, Q Loss: 23.54836130142212, Actor Loss: -50.06605339050293

Episode 1331: Time: 0.035207271575927734, Total Reward: 25.193738854858, Q Loss: 18.79711675643921, Actor Loss: -47.986270904541016
Episode 1332: Time: 0.03513216972351074, Total Reward: 25.154933802876013, Q Loss: 20.62122106552124, Actor Loss: -49.785369873046875
Episode 1333: Time: 0.03535628318786621, Total Reward: 25.7559542647257, Q Loss: 22.17411708831787, Actor Loss: -45.93142032623291
Episode 1334: Time: 0.034952640533447266, Total Reward: 25.393291888309932, Q Loss: 21.098945140838623, Actor Loss: -49.768253326416016
Episode 1335: Time: 0.03493499755859375, Total Reward: 25.4845357024259, Q Loss: 22.51988410949707, Actor Loss: -49.12772560119629
Episode 1336: Time: 0.026379823684692383, Total Reward: 16.904884512130582, Q Loss: 15.683280944824219, Actor Loss: -41.45750713348389
Episode 1337: Time: 0.034999847412109375, Total Reward: 25.4388051386816, Q Loss: 20.861754417419434, Actor Loss: -47.480892181396484
Episode 1338: Time: 0.03515934944152832, Total Reward: 25.42302964352498, Q Loss: 20.131452798843384, Actor Loss: -44.89899826049805
Episode 1339: Time: 0.02628493309020996, Total Reward: 16.935574143797314, Q Loss: 14.589855194091797, Actor Loss: -35.911139488220215
Episode 1340: Time: 0.03532838821411133, Total Reward: 25.2833488230729, Q Loss: 22.661663055419922, Actor Loss: -47.21394729614258
Episode 1341: Time: 0.03500533103942871, Total Reward: 25.11852561610162, Q Loss: 17.96786403656006, Actor Loss: -50.02987480163574
Episode 1342: Time: 0.03494095802307129, Total Reward: 25.376957314655247, Q Loss: 13.927401304244995, Actor Loss: -46.00051784515381
Episode 1343: Time: 0.026285886764526367, Total Reward: 16.833233564691554, Q Loss: 20.97802734375, Actor Loss: -38.967591285705566
Episode 1344: Time: 0.034925222396850586, Total Reward: 25.72126011101136, Q Loss: 19.87360382080078, Actor Loss: -46.84439659118652
Episode 1345: Time: 0.03487825393676758, Total Reward: 25.33501512430776, Q Loss: 20.515514135360718, Actor Loss: -46.08490180969238
Episode 1346: Time: 0.03520822525024414, Total Reward: 25.582600368263346, Q Loss: 22.944092273712158, Actor Loss: -49.39922904968262
Episode 1347: Time: 0.03502488136291504, Total Reward: 26.022307922574583, Q Loss: 22.744717121124268, Actor Loss: -48.07797431945801
Episode 1348: Time: 0.034956932067871094, Total Reward: 25.50914346389101, Q Loss: 21.63446068763733, Actor Loss: -47.32277774810791
Episode 1349: Time: 0.0348811149597168, Total Reward: 25.185156317054528, Q Loss: 18.72542643547058, Actor Loss: -42.39105224609375
Episode 1350: Time: 0.03485226631164551, Total Reward: 25.312573068417663, Q Loss: 19.21008038520813, Actor Loss: -48.39208698272705
Episode 1351: Time: 0.035123586654663086, Total Reward: 25.555269978542633, Q Loss: 18.631953477859497, Actor Loss: -46.87839412689209
Episode 1352: Time: 0.026786327362060547, Total Reward: 16.9326172650093, Q Loss: 14.657729625701904, Actor Loss: -29.803714752197266
Episode 1353: Time: 0.035106658935546875, Total Reward: 26.07728493694185, Q Loss: 19.83951711654663, Actor Loss: -52.2108678817749
Episode 1354: Time: 0.035015106201171875, Total Reward: 25.49893613262435, Q Loss: 27.67573642730713, Actor Loss: -53.3483304977417
Episode 1355: Time: 0.02634429931640625, Total Reward: 16.841605421962402, Q Loss: 12.333613872528076, Actor Loss: -32.437926292419434
Episode 1356: Time: 0.026258468627929688, Total Reward: 16.888877552938965, Q Loss: 17.565933227539062, Actor Loss: -39.84797191619873
Episode 1357: Time: 0.03496527671813965, Total Reward: 25.648722738572342, Q Loss: 18.48892045021057, Actor Loss: -46.617987632751465
Episode 1358: Time: 0.03481316566467285, Total Reward: 25.236507940743564, Q Loss: 25.33403468132019, Actor Loss: -46.45484161376953

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Episode 1359: Time: 0.03530120849609375, Total Reward: 25.463993800138734, Q
Loss: 24.6386137008667, Actor Loss: -48.0837516784668
Episode 1360: Time: 0.026406049728393555, Total Reward: 16.936249314001696,
Q Loss: 23.382362365722656, Actor Loss: -41.621999740600586
Episode 1361: Time: 0.03516435623168945, Total Reward: 25.269195133056172, Q
Loss: 18.42500114440918, Actor Loss: -51.035386085510254
Episode 1362: Time: 0.0262753963470459, Total Reward: 16.957203244729605, Q
Loss: 11.3633713722229, Actor Loss: -35.31842613220215
Episode 1363: Time: 0.034938812255859375, Total Reward: 25.19772687603248, Q
Loss: 17.439223527908325, Actor Loss: -44.59138107299805
Episode 1364: Time: 0.026298999786376953, Total Reward: 16.744262503053967,
Q Loss: 15.389158487319946, Actor Loss: -36.395941734313965
Episode 1365: Time: 0.03511929512023926, Total Reward: 25.19018033094777, Q
Loss: 18.29558825492859, Actor Loss: -47.47462177276611
Episode 1366: Time: 0.0354313850402832, Total Reward: 25.27187761677973, Q L
oss: 15.641229391098022, Actor Loss: -46.867841720581055
Episode 1367: Time: 0.0350341796875, Total Reward: 25.590666159081582, Q Los
s: 15.996062994003296, Actor Loss: -46.17109394073486
Episode 1368: Time: 0.035001516342163086, Total Reward: 25.536625902661793,
Q Loss: 18.772711515426636, Actor Loss: -44.54013919830322
Episode 1369: Time: 0.03493142127990723, Total Reward: 26.172708758146, Q Lo
ss: 18.86935257911682, Actor Loss: -47.36916446685791
Episode 1370: Time: 0.03500056266784668, Total Reward: 25.78940672960276, Q
Loss: 20.77903413772583, Actor Loss: -43.35622787475586
Episode 1371: Time: 0.03494000434875488, Total Reward: 25.61248875841093, Q
Loss: 25.936458110809326, Actor Loss: -46.39453315734863
Episode 1372: Time: 0.03550076484680176, Total Reward: 25.31776581718243, Q
Loss: 25.890871047973633, Actor Loss: -52.54995536804199
Episode 1373: Time: 0.035022735595703125, Total Reward: 25.235684610301934,
Q Loss: 18.572239637374878, Actor Loss: -43.28189754486084
Episode 1374: Time: 0.026272058486938477, Total Reward: 16.94225101857691, Q
Loss: 14.20319938659668, Actor Loss: -33.79525184631348
Episode 1375: Time: 0.035015106201171875, Total Reward: 26.062924088002937,
Q Loss: 20.663304328918457, Actor Loss: -50.21383476257324
Episode 1376: Time: 0.03499960899353027, Total Reward: 25.407426956850067, Q
Loss: 18.75522804260254, Actor Loss: -46.42197036743164
Episode 1377: Time: 0.03492379188537598, Total Reward: 25.327877191886916, Q
Loss: 19.63118577003479, Actor Loss: -42.59850597381592
Episode 1378: Time: 0.035447120666503906, Total Reward: 25.47364227058826, Q
Loss: 19.419448614120483, Actor Loss: -50.89730644226074
Episode 1379: Time: 0.035032033920288086, Total Reward: 25.939793588565283,
Q Loss: 20.454925060272217, Actor Loss: -46.003387451171875
Episode 1380: Time: 0.026331424713134766, Total Reward: 16.981394067504894,
Q Loss: 15.3525390625, Actor Loss: -35.55117702484131
Episode 1381: Time: 0.026310205459594727, Total Reward: 16.900783084476696,
Q Loss: 13.681710243225098, Actor Loss: -33.57267093658447
Episode 1382: Time: 0.03499650955200195, Total Reward: 25.37401449870285, Q
Loss: 18.08561420440674, Actor Loss: -43.604275703430176
Episode 1383: Time: 0.034929752349853516, Total Reward: 25.451724719988697,
Q Loss: 24.732590675354004, Actor Loss: -46.25605297088623
Episode 1384: Time: 0.03503704071044922, Total Reward: 25.45168068010428, Q
Loss: 21.534647464752197, Actor Loss: -47.52049446105957
Episode 1385: Time: 0.035507917404174805, Total Reward: 25.860036274442088,
Q Loss: 17.985841751098633, Actor Loss: -44.61241817474365
Episode 1386: Time: 0.03515982627868652, Total Reward: 25.384571681511165, Q
Loss: 20.12395739555359, Actor Loss: -46.152122497558594
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Episode 1387: Time: 0.026294708251953125, Total Reward: 16.92021855530494, Q Loss: 16.451050281524658, Actor Loss: -35.01162910461426
Episode 1388: Time: 0.034986257553100586, Total Reward: 25.33003877991835, Q Loss: 16.68473172187805, Actor Loss: -42.59157848358154
Episode 1389: Time: 0.03499484062194824, Total Reward: 26.260543308939628, Q Loss: 17.821481227874756, Actor Loss: -45.20895481109619
Episode 1390: Time: 0.034941911697387695, Total Reward: 25.28583500343456, Q Loss: 17.5233314037323, Actor Loss: -51.75794219970703
Episode 1391: Time: 0.035492897033691406, Total Reward: 25.707930922047403, Q Loss: 18.36631965637207, Actor Loss: -42.822720527648926
Episode 1392: Time: 0.03514266014099121, Total Reward: 25.495002151433642, Q Loss: 18.933595180511475, Actor Loss: -50.40376949310303
Episode 1393: Time: 0.03500986099243164, Total Reward: 25.4694098961138, Q Loss: 24.790192127227783, Actor Loss: -49.36615180969238
Episode 1394: Time: 0.026291370391845703, Total Reward: 16.81836394023973, Q Loss: 14.192691326141357, Actor Loss: -39.07322311401367
Episode 1395: Time: 0.03503155708312988, Total Reward: 25.190519413856364, Q Loss: 24.180203437805176, Actor Loss: -45.24766445159912
Episode 1396: Time: 0.04358100891113281, Total Reward: 35.08110476453059, Q Loss: 25.815982818603516, Actor Loss: -59.49630546569824
Episode 1397: Time: 0.03550267219543457, Total Reward: 25.424189028496993, Q Loss: 20.049705028533936, Actor Loss: -46.211509704589844
Episode 1398: Time: 0.03498411178588867, Total Reward: 25.75454673020419, Q Loss: 16.340400218963623, Actor Loss: -49.212761878967285
Episode 1399: Time: 0.034966468811035156, Total Reward: 25.47211925383674, Q Loss: 22.467971324920654, Actor Loss: -49.66646766662598
Validation Mean: 20.9748844131288, Validation Std: 4.178712332002629
saving model
Episode 1400: Time: 0.03575706481933594, Total Reward: 25.307290896745243, Q Loss: 18.618107795715332, Actor Loss: -45.32684898376465
Episode 1401: Time: 0.03491091728210449, Total Reward: 26.18298094488571, Q Loss: 16.929799795150757, Actor Loss: -46.639577865600586
Episode 1402: Time: 0.03505563735961914, Total Reward: 25.602296658263562, Q Loss: 25.6914005279541, Actor Loss: -47.58452033996582
Episode 1403: Time: 0.026281118392944336, Total Reward: 16.763986590180288, Q Loss: 18.994184494018555, Actor Loss: -42.62441349029541
Episode 1404: Time: 0.043514251708984375, Total Reward: 34.829986821348385, Q Loss: 27.679307460784912, Actor Loss: -56.68690776824951
Episode 1405: Time: 0.03521895408630371, Total Reward: 25.58586569852226, Q Loss: 18.609986066818237, Actor Loss: -45.982205390930176
Episode 1406: Time: 0.035430908203125, Total Reward: 25.486803915790954, Q Loss: 21.864500999450684, Actor Loss: -52.79601287841797
Episode 1407: Time: 0.035538434982299805, Total Reward: 25.39838965189546, Q Loss: 29.392412185668945, Actor Loss: -50.91816520690918
Episode 1408: Time: 0.03503847122192383, Total Reward: 25.323137735891112, Q Loss: 19.808289051055908, Actor Loss: -48.493316650390625
Episode 1409: Time: 0.034990787506103516, Total Reward: 25.326063288873556, Q Loss: 18.039637088775635, Actor Loss: -48.242154121398926
Episode 1410: Time: 0.026325225830078125, Total Reward: 16.913051764774174, Q Loss: 17.100106239318848, Actor Loss: -34.89397048950195
Episode 1411: Time: 0.035088539123535156, Total Reward: 25.760795489883275, Q Loss: 21.11814022064209, Actor Loss: -48.85272789001465
Episode 1412: Time: 0.035157203674316406, Total Reward: 25.574469299427577, Q Loss: 19.832085132598877, Actor Loss: -48.92686080932617
Episode 1413: Time: 0.026217769050090332, Total Reward: 16.933581364555433, Q Loss: 17.465412139892578, Actor Loss: -35.12961196899414

Episode 1414: Time: 0.03497123718261719, Total Reward: 25.689619205284593, Q Loss: 19.660234212875366, Actor Loss: -49.85257053375244
Episode 1415: Time: 0.03496956825256348, Total Reward: 25.659615061693778, Q Loss: 21.942049026489258, Actor Loss: -45.522504806518555
Episode 1416: Time: 0.026262998580932617, Total Reward: 17.03287492211802, Q Loss: 19.068795680999756, Actor Loss: -37.993348121643066
Episode 1417: Time: 0.034937381744384766, Total Reward: 25.362553294912995, Q Loss: 27.6967511177063, Actor Loss: -45.74543857574463
Episode 1418: Time: 0.03483462333679199, Total Reward: 25.82547520447614, Q Loss: 16.670530080795288, Actor Loss: -52.0936803817749
Episode 1419: Time: 0.035382747650146484, Total Reward: 25.665902776729794, Q Loss: 18.82896327972412, Actor Loss: -46.17913246154785
Episode 1420: Time: 0.03503775596618652, Total Reward: 25.406863441007246, Q Loss: 25.913403272628784, Actor Loss: -49.189805030822754
Episode 1421: Time: 0.026285171508789062, Total Reward: 16.83139934370325, Q Loss: 13.874270677566528, Actor Loss: -37.96565818786621
Episode 1422: Time: 0.03504228591918945, Total Reward: 25.730143598213832, Q Loss: 18.906883716583252, Actor Loss: -48.95261192321777
Episode 1423: Time: 0.03481030464172363, Total Reward: 25.401741295642942, Q Loss: 21.413438320159912, Actor Loss: -49.89246845245361
Episode 1424: Time: 0.026254653930664062, Total Reward: 16.900667638020778, Q Loss: 12.599260091781616, Actor Loss: -34.8060827255249
Episode 1425: Time: 0.034902095794677734, Total Reward: 25.43744209724417, Q Loss: 21.624523401260376, Actor Loss: -46.473588943481445
Episode 1426: Time: 0.03532290458679199, Total Reward: 25.560315444063292, Q Loss: 17.192471265792847, Actor Loss: -47.57336902618408
Episode 1427: Time: 0.02634263038635254, Total Reward: 16.95455058844615, Q Loss: 17.624496936798096, Actor Loss: -35.51285266876221
Episode 1428: Time: 0.026090383529663086, Total Reward: 16.95476987736717, Q Loss: 14.420037031173706, Actor Loss: -39.29487609863281
Episode 1429: Time: 0.026149511337280273, Total Reward: 16.8315018587387, Q Loss: 14.400728464126587, Actor Loss: -33.777164459228516
Episode 1430: Time: 0.026245594024658203, Total Reward: 16.871679527782632, Q Loss: 21.300671100616455, Actor Loss: -31.877930641174316
Episode 1431: Time: 0.034720659255981445, Total Reward: 25.724859492798164, Q Loss: 22.337483167648315, Actor Loss: -51.427157402038574
Episode 1432: Time: 0.03482365608215332, Total Reward: 25.448458760436562, Q Loss: 23.108810901641846, Actor Loss: -46.59098434448242
Episode 1433: Time: 0.035138845443725586, Total Reward: 25.65632088612394, Q Loss: 21.796213150024414, Actor Loss: -46.247023582458496
Episode 1434: Time: 0.03490614891052246, Total Reward: 25.283555701388686, Q Loss: 22.234739065170288, Actor Loss: -44.36277770996094
Episode 1435: Time: 0.03499603271484375, Total Reward: 25.6095757448568, Q Loss: 18.28028154373169, Actor Loss: -46.61423587799072
Episode 1436: Time: 0.03481245040893555, Total Reward: 25.375491761569783, Q Loss: 20.699129343032837, Actor Loss: -49.45154094696045
Episode 1437: Time: 0.026162385940551758, Total Reward: 16.87395472163353, Q Loss: 14.308905601501465, Actor Loss: -38.34741687774658
Episode 1438: Time: 0.034836769104003906, Total Reward: 25.907016479228165, Q Loss: 28.664018630981445, Actor Loss: -52.08836555480957
Episode 1439: Time: 0.03519010543823242, Total Reward: 26.036723643309685, Q Loss: 19.3127498626709, Actor Loss: -43.65977764129639
Episode 1440: Time: 0.03491997718811035, Total Reward: 25.876817992544616, Q Loss: 20.12939691543579, Actor Loss: -45.56367015838623
Episode 1441: Time: 0.03485822677612305, Total Reward: 25.196815509322485, Q Loss: 22.318053007125854, Actor Loss: -50.43073749542236

Episode 1442: Time: 0.034876108169555664, Total Reward: 25.260456578130324, Q Loss: 21.154393196105957, Actor Loss: -48.64864730834961
Episode 1443: Time: 0.0348355770111084, Total Reward: 25.268399858163896, Q Loss: 22.65923833847046, Actor Loss: -47.12534713745117
Episode 1444: Time: 0.03473472595214844, Total Reward: 25.335775171424284, Q Loss: 17.412442207336426, Actor Loss: -44.87696647644043
Episode 1445: Time: 0.03531980514526367, Total Reward: 25.460299888787244, Q Loss: 17.640349864959717, Actor Loss: -46.856109619140625
Episode 1446: Time: 0.03487348556518555, Total Reward: 25.23513162818576, Q Loss: 20.535372972488403, Actor Loss: -51.62923336029053
Episode 1447: Time: 0.0349733829498291, Total Reward: 25.237542750848657, Q Loss: 17.33820390701294, Actor Loss: -43.302602767944336
Episode 1448: Time: 0.03487706184387207, Total Reward: 25.768147722717277, Q Loss: 28.636409282684326, Actor Loss: -45.91220474243164
Episode 1449: Time: 0.026450157165527344, Total Reward: 16.90815291416098, Q Loss: 17.01561450958252, Actor Loss: -37.731088638305664
Episode 1450: Time: 0.02627706527709961, Total Reward: 16.99386561537653, Q Loss: 19.569863319396973, Actor Loss: -36.01915168762207
Episode 1451: Time: 0.026308536529541016, Total Reward: 16.920054883368344, Q Loss: 11.512646198272705, Actor Loss: -36.60184574127197
Episode 1452: Time: 0.02664923667907715, Total Reward: 16.923195254770018, Q Loss: 16.06395387649536, Actor Loss: -31.297255516052246
Episode 1453: Time: 0.03490900993347168, Total Reward: 25.75629830893658, Q Loss: 25.649678468704224, Actor Loss: -47.58831787109375
Episode 1454: Time: 0.043695688247680664, Total Reward: 34.866108235619414, Q Loss: 29.611845016479492, Actor Loss: -61.00243949890137
Episode 1455: Time: 0.03498196601867676, Total Reward: 25.26451543230826, Q Loss: 21.530157566070557, Actor Loss: -50.85999298095703
Episode 1456: Time: 0.034974098205566406, Total Reward: 25.246739722314192, Q Loss: 18.164194107055664, Actor Loss: -46.69606685638428
Episode 1457: Time: 0.03513193130493164, Total Reward: 25.125772397578356, Q Loss: 19.26799488067627, Actor Loss: -48.81113910675049
Episode 1458: Time: 0.035445213317871094, Total Reward: 25.51632380990712, Q Loss: 21.172152042388916, Actor Loss: -42.503286361694336
Episode 1459: Time: 0.026474952697753906, Total Reward: 16.91281994148449, Q Loss: 11.074243545532227, Actor Loss: -35.4298734664917
Episode 1460: Time: 0.026161909103393555, Total Reward: 16.96690840743408, Q Loss: 14.14233112335205, Actor Loss: -33.402923583984375
Episode 1461: Time: 0.03498673439025879, Total Reward: 25.521199845153244, Q Loss: 19.45062494277954, Actor Loss: -49.8815393447876
Episode 1462: Time: 0.03476691246032715, Total Reward: 25.967284557973965, Q Loss: 20.787466049194336, Actor Loss: -44.67946815490723
Episode 1463: Time: 0.026238441467285156, Total Reward: 16.88959997193109, Q Loss: 16.327115535736084, Actor Loss: -36.303606033325195
Episode 1464: Time: 0.03522920608520508, Total Reward: 25.83781279441481, Q Loss: 23.495737075805664, Actor Loss: -49.718024253845215
Episode 1465: Time: 0.03540372848510742, Total Reward: 25.595457162073316, Q Loss: 20.542043685913086, Actor Loss: -49.702741622924805
Episode 1466: Time: 0.043555498123168945, Total Reward: 34.94927290341745, Q Loss: 24.421141624450684, Actor Loss: -56.2024507522583
Episode 1467: Time: 0.034948110580444336, Total Reward: 25.486063729511738, Q Loss: 21.62916374206543, Actor Loss: -49.63990497589111
Episode 1468: Time: 0.03485250473022461, Total Reward: 25.679995518875547, Q Loss: 20.56578016281128, Actor Loss: -46.73589515686035
Episode 1469: Time: 0.03489351272583008, Total Reward: 26.10083329359201, Q Loss: 24.468553066253662, Actor Loss: -48.86191749572754

Episode 1470: Time: 0.035004377365112305, Total Reward: 26.01294858971444, Q Loss: 24.40699529647827, Actor Loss: -46.561692237854004
Episode 1471: Time: 0.061241865158081055, Total Reward: 53.85356176943947, Q Loss: 38.96909213066101, Actor Loss: -88.93122673034668
Episode 1472: Time: 0.034881591796875, Total Reward: 26.158930433834517, Q Loss: 21.400627851486206, Actor Loss: -50.715020179748535
Episode 1473: Time: 0.052135467529296875, Total Reward: 44.194862088574965, Q Loss: 33.71826887130737, Actor Loss: -68.97907066345215
Episode 1474: Time: 0.06927847862243652, Total Reward: 63.772645384492726, Q Loss: 30.592535972595215, Actor Loss: -86.39070415496826
Episode 1475: Time: 0.06965160369873047, Total Reward: 63.189614114179214, Q Loss: 37.629568099975586, Actor Loss: -93.04142570495605
Episode 1476: Time: 0.07806205749511719, Total Reward: 73.14697760803692, Q Loss: 49.62044286727905, Actor Loss: -110.63248062133789
Episode 1477: Time: 0.10386085510253906, Total Reward: 100.41181031751584, Q Loss: 58.17191696166992, Actor Loss: -143.34234046936035
Episode 1478: Time: 0.09510469436645508, Total Reward: 90.88900304590868, Q Loss: 57.39726972579956, Actor Loss: -138.82423973083496
Episode 1479: Time: 0.1031954288482666, Total Reward: 100.67572782060047, Q Loss: 65.56203126907349, Actor Loss: -148.9150447845459
Episode 1480: Time: 0.06028485298156738, Total Reward: 53.72179548911737, Q Loss: 42.84254264831543, Actor Loss: -89.41649627685547
Episode 1481: Time: 0.060648202896118164, Total Reward: 53.6703000542761, Q Loss: 41.50619959831238, Actor Loss: -91.61153888702393
Episode 1482: Time: 0.06015658378601074, Total Reward: 53.608458169234794, Q Loss: 47.99397659301758, Actor Loss: -86.51333618164062
Episode 1483: Time: 0.06027674674987793, Total Reward: 53.54887219762103, Q Loss: 39.689579010009766, Actor Loss: -91.89638900756836
Episode 1484: Time: 0.051596641540527344, Total Reward: 44.714311934653395, Q Loss: 35.26686120033264, Actor Loss: -77.35446166992188
Episode 1485: Time: 0.060727596282958984, Total Reward: 53.64831374292003, Q Loss: 50.42363452911377, Actor Loss: -87.44016456604004
Episode 1486: Time: 0.05165600776672363, Total Reward: 44.68817799992661, Q Loss: 37.78450965881348, Actor Loss: -78.29508018493652
Episode 1487: Time: 0.06846928596496582, Total Reward: 63.21116248552881, Q Loss: 59.20704746246338, Actor Loss: -101.87614822387695
Episode 1488: Time: 0.06883835792541504, Total Reward: 62.89872434053814, Q Loss: 63.189337730407715, Actor Loss: -110.80178833007812
Episode 1489: Time: 0.0695040225982666, Total Reward: 63.09738691633301, Q Loss: 57.02388024330139, Actor Loss: -94.66105079650879
Episode 1490: Time: 0.04355263710021973, Total Reward: 35.25843055978128, Q Loss: 30.645636320114136, Actor Loss: -67.73401165008545
Episode 1491: Time: 0.06078290939331055, Total Reward: 54.08890658553698, Q Loss: 59.416844844818115, Actor Loss: -88.87611293792725
Episode 1492: Time: 0.06041717529296875, Total Reward: 53.85838012139888, Q Loss: 48.92595338821411, Actor Loss: -89.47169780731201
Episode 1493: Time: 0.06956601142883301, Total Reward: 63.5039524766959, Q Loss: 65.87235307693481, Actor Loss: -110.64323902130127
Episode 1494: Time: 0.06035566329956055, Total Reward: 54.089760609384854, Q Loss: 52.14500904083252, Actor Loss: -84.94366264343262
Episode 1495: Time: 0.05172610282897949, Total Reward: 44.56431335091169, Q Loss: 33.8728973865509, Actor Loss: -75.20496273040771
Episode 1496: Time: 0.06024742126464844, Total Reward: 53.487242067169866, Q Loss: 50.07343029975891, Actor Loss: -91.3358211517334
Episode 1497: Time: 0.06924653053283691, Total Reward: 63.251111311644635, Q Loss: 71.06262302398682, Actor Loss: -106.54042148590088

Episode 1498: Time: 0.0689077377319336, Total Reward: 62.95014837445345, Q Loss: 57.22144865989685, Actor Loss: -107.01453685760498
Episode 1499: Time: 0.051917076110839844, Total Reward: 44.30858605903957, Q Loss: 36.48647975921631, Actor Loss: -69.06900215148926
Validation Mean: 60.66010102278834, Validation Std: 5.791402372837292
saving model
Episode 1500: Time: 0.061126708984375, Total Reward: 54.17951226533301, Q Loss: 72.10795974731445, Actor Loss: -91.47985935211182
Episode 1501: Time: 0.06043529510498047, Total Reward: 53.488638314252476, Q Loss: 48.689799308776855, Actor Loss: -93.02821159362793
Episode 1502: Time: 0.060341596603393555, Total Reward: 54.11898822291439, Q Loss: 48.93073892593384, Actor Loss: -89.09713649749756
Episode 1503: Time: 0.06093740463256836, Total Reward: 53.382540014244064, Q Loss: 42.44985103607178, Actor Loss: -96.15401840209961
Episode 1504: Time: 0.051833152770996094, Total Reward: 44.41198892180973, Q Loss: 45.20401120185852, Actor Loss: -82.68262672424316
Episode 1505: Time: 0.06035184860229492, Total Reward: 53.94683220731452, Q Loss: 61.01949119567871, Actor Loss: -88.47876930236816
Episode 1506: Time: 0.051802873611450195, Total Reward: 44.61009620620147, Q Loss: 57.38725566864014, Actor Loss: -76.79512977600098
Episode 1507: Time: 0.05227184295654297, Total Reward: 44.48084522604938, Q Loss: 51.19818592071533, Actor Loss: -80.12092876434326
Episode 1508: Time: 0.06891536712646484, Total Reward: 62.959350581179045, Q Loss: 69.83902215957642, Actor Loss: -103.04404544830322
Episode 1509: Time: 0.06882882118225098, Total Reward: 62.924893695644634, Q Loss: 64.9049859046936, Actor Loss: -110.38784980773926
Episode 1510: Time: 0.07827997207641602, Total Reward: 72.45049819013279, Q Loss: 70.01740980148315, Actor Loss: -118.73397254943848
Episode 1511: Time: 0.07758569717407227, Total Reward: 72.37292691398514, Q Loss: 76.75182223320007, Actor Loss: -121.07705974578857
Episode 1512: Time: 0.06033468246459961, Total Reward: 53.88983240649592, Q Loss: 43.04940462112427, Actor Loss: -90.7569522857666
Episode 1513: Time: 0.07791590690612793, Total Reward: 72.72219516507725, Q Loss: 60.34180498123169, Actor Loss: -119.08264255523682
Episode 1514: Time: 0.06048297882080078, Total Reward: 54.0062201395661, Q Loss: 64.73604726791382, Actor Loss: -93.07966232299805
Episode 1515: Time: 0.06038022041320801, Total Reward: 53.79672770349879, Q Loss: 49.32892417907715, Actor Loss: -85.92448711395264
Episode 1516: Time: 0.11244463920593262, Total Reward: 109.9644811257232, Q Loss: 119.22061681747437, Actor Loss: -181.7810583114624
Episode 1517: Time: 0.06068730354309082, Total Reward: 53.58763908680041, Q Loss: 47.88590478897095, Actor Loss: -89.84227466583252
Episode 1518: Time: 0.07796335220336914, Total Reward: 72.43895765416771, Q Loss: 77.61678981781006, Actor Loss: -122.73532772064209
Episode 1519: Time: 0.06955862045288086, Total Reward: 63.18049146454912, Q Loss: 83.98459720611572, Actor Loss: -112.73202133178711
Episode 1520: Time: 0.06949758529663086, Total Reward: 63.64114278066172, Q Loss: 71.44715690612793, Actor Loss: -112.86057949066162
Episode 1521: Time: 0.06918096542358398, Total Reward: 63.399959776377415, Q Loss: 74.3512315750122, Actor Loss: -103.72480964660645
Episode 1522: Time: 0.05186009407043457, Total Reward: 44.192167844638746, Q Loss: 61.2078971862793, Actor Loss: -89.02685642242432
Episode 1523: Time: 0.0780036449432373, Total Reward: 72.5194901236391, Q Loss: 86.63173723220825, Actor Loss: -118.96294403076172
Episode 1524: Time: 0.06922054290771484, Total Reward: 63.28809351582849, Q Loss: 57.762574195861816, Actor Loss: -105.7950325012207

Episode 1525: Time: 0.08612251281738281, Total Reward: 81.88799711434379, Q Loss: 109.53250980377197, Actor Loss: -139.48193264007568
Episode 1526: Time: 0.08685946464538574, Total Reward: 81.94488158366045, Q Loss: 81.42406511306763, Actor Loss: -138.36980628967285
Episode 1527: Time: 0.07777643203735352, Total Reward: 72.49343536199164, Q Loss: 96.45194005966187, Actor Loss: -123.70763683319092
Episode 1528: Time: 0.08679723739624023, Total Reward: 81.97436111799183, Q Loss: 103.2295184135437, Actor Loss: -144.66966724395752
Episode 1529: Time: 0.07815694808959961, Total Reward: 72.2829316557677, Q Loss: 94.10465717315674, Actor Loss: -125.4195556640625
Episode 1530: Time: 0.07772088050842285, Total Reward: 72.77782005802057, Q Loss: 72.2664566040039, Actor Loss: -123.25577926635742
Episode 1531: Time: 0.06888985633850098, Total Reward: 62.950975950220865, Q Loss: 76.1162166595459, Actor Loss: -115.40502452850342
Episode 1532: Time: 0.06155681610107422, Total Reward: 54.086741012217566, Q Loss: 55.00790023803711, Actor Loss: -99.06323432922363
Episode 1533: Time: 0.1381211280822754, Total Reward: 137.97619773427516, Q Loss: 156.55648851394653, Actor Loss: -223.844482421875
Episode 1534: Time: 0.08670663833618164, Total Reward: 82.07782025421129, Q Loss: 100.80404472351074, Actor Loss: -141.8532247543335
Episode 1535: Time: 0.06910181045532227, Total Reward: 63.37290515217658, Q Loss: 91.67716836929321, Actor Loss: -118.45545864105225
Episode 1536: Time: 0.11177206039428711, Total Reward: 110.04604993229617, Q Loss: 99.36725735664368, Actor Loss: -183.0282392501831
Episode 1537: Time: 0.16434025764465332, Total Reward: 164.75697109767097, Q Loss: 190.80392408370972, Actor Loss: -282.9660835266113
Episode 1538: Time: 0.052000999450683594, Total Reward: 44.840016021325646, Q Loss: 69.68266105651855, Actor Loss: -92.28996753692627
Episode 1539: Time: 0.16397857666015625, Total Reward: 166.06915160390818, Q Loss: 169.083354473114, Actor Loss: -283.5948314666748
Episode 1540: Time: 0.08644962310791016, Total Reward: 81.90691020496307, Q Loss: 84.20162153244019, Actor Loss: -146.99635791778564
Episode 1541: Time: 0.06941771507263184, Total Reward: 63.44828323071981, Q Loss: 78.56097030639648, Actor Loss: -118.90509033203125
Episode 1542: Time: 0.12219405174255371, Total Reward: 119.27506615304438, Q Loss: 133.3601336479187, Actor Loss: -216.40871620178223
Episode 1543: Time: 0.07785964012145996, Total Reward: 71.99496102087788, Q Loss: 83.20257520675659, Actor Loss: -132.48066520690918
Episode 1544: Time: 0.06908488273620605, Total Reward: 62.755117503538884, Q Loss: 100.63968563079834, Actor Loss: -132.86067962646484
Episode 1545: Time: 0.061127424240112305, Total Reward: 53.89185557467105, Q Loss: 83.2772650718689, Actor Loss: -100.98235607147217
Episode 1546: Time: 0.08667707443237305, Total Reward: 81.70028477153618, Q Loss: 119.21767902374268, Actor Loss: -158.09276676177979
Episode 1547: Time: 0.0607752799987793, Total Reward: 54.01108902039483, Q Loss: 54.1024215221405, Actor Loss: -103.25444889068604
Episode 1548: Time: 0.06115078926086426, Total Reward: 53.50459884732355, Q Loss: 81.09041285514832, Actor Loss: -107.32847690582275
Episode 1549: Time: 0.06074357032775879, Total Reward: 54.21988154644107, Q Loss: 65.81433153152466, Actor Loss: -104.92404174804688
Episode 1550: Time: 0.060851335525512695, Total Reward: 53.50400295572699, Q Loss: 57.463486671447754, Actor Loss: -103.09373378753662
Episode 1551: Time: 0.06083822250366211, Total Reward: 53.983897649047044, Q Loss: 78.34130954742432, Actor Loss: -102.04857349395752
Episode 1552: Time: 0.06113481521606445, Total Reward: 53.595212921379996, Q Loss: 95.64147186279297, Actor Loss: -108.6690034866333

Episode 1553: Time: 0.06932377815246582, Total Reward: 62.648780812813655, Q Loss: 84.97832679748535, Actor Loss: -121.332350730896
Episode 1554: Time: 0.13880658149719238, Total Reward: 138.1255673156514, Q Loss: 187.04558610916138, Actor Loss: -252.15941429138184
Episode 1555: Time: 0.06066393852233887, Total Reward: 53.938644376880816, Q Loss: 109.62577486038208, Actor Loss: -115.23256969451904
Episode 1556: Time: 0.07801222801208496, Total Reward: 72.83111902043186, Q Loss: 130.23533248901367, Actor Loss: -142.54213619232178
Episode 1557: Time: 0.06957006454467773, Total Reward: 63.53573727385669, Q Loss: 88.30195999145508, Actor Loss: -128.21859455108643
Episode 1558: Time: 0.05219674110412598, Total Reward: 44.82091543833179, Q Loss: 67.1175889968872, Actor Loss: -94.00801658630371
Episode 1559: Time: 0.06062793731689453, Total Reward: 53.3200294760926, Q Loss: 74.21550559997559, Actor Loss: -112.42128372192383
Episode 1560: Time: 0.052260637283325195, Total Reward: 44.61865296173259, Q Loss: 57.036407470703125, Actor Loss: -90.57430362701416
Episode 1561: Time: 0.12177681922912598, Total Reward: 119.13640385789996, Q Loss: 161.31999111175537, Actor Loss: -228.26241874694824
Episode 1562: Time: 0.060832977294921875, Total Reward: 53.813975350091546, Q Loss: 79.61345338821411, Actor Loss: -107.51322269439697
Episode 1563: Time: 0.060838937759399414, Total Reward: 54.0177405700766, Q Loss: 70.41336393356323, Actor Loss: -109.94530773162842
Episode 1564: Time: 0.06952333450317383, Total Reward: 63.07450504256161, Q Loss: 87.85198903083801, Actor Loss: -132.84646224975586
Episode 1565: Time: 0.06132864952087402, Total Reward: 53.97362518532983, Q Loss: 93.13012361526489, Actor Loss: -104.71629238128662
Episode 1566: Time: 0.13833832740783691, Total Reward: 137.6305034308202, Q Loss: 229.42825889587402, Actor Loss: -267.2481870651245
Episode 1567: Time: 0.06979489326477051, Total Reward: 63.4487358989744, Q Loss: 95.22741222381592, Actor Loss: -135.85978889465332
Episode 1568: Time: 0.06932735443115234, Total Reward: 63.46694163271904, Q Loss: 85.31579828262329, Actor Loss: -119.7203016281128
Episode 1569: Time: 0.07801032066345215, Total Reward: 72.50229988242198, Q Loss: 103.61008930206299, Actor Loss: -147.00225067138672
Episode 1570: Time: 0.08688139915466309, Total Reward: 82.15246783677784, Q Loss: 144.6454644203186, Actor Loss: -164.26953506469727
Episode 1571: Time: 0.07776594161987305, Total Reward: 72.77945567162243, Q Loss: 115.20123767852783, Actor Loss: -151.37712383270264
Episode 1572: Time: 0.10355138778686523, Total Reward: 100.64746176103961, Q Loss: 151.42441511154175, Actor Loss: -197.13594722747803
Episode 1573: Time: 0.08668971061706543, Total Reward: 82.06468745641291, Q Loss: 110.13366889953613, Actor Loss: -165.75111961364746
Episode 1574: Time: 0.0862116813659668, Total Reward: 81.33743967840549, Q Loss: 137.99818515777588, Actor Loss: -164.86011600494385
Episode 1575: Time: 0.0604248046875, Total Reward: 53.93241433609607, Q Loss: 81.3291654586792, Actor Loss: -118.20824527740479
Episode 1576: Time: 0.07824182510375977, Total Reward: 72.78602693530578, Q Loss: 145.51426696777344, Actor Loss: -155.0214672088623
Episode 1577: Time: 0.05194807052612305, Total Reward: 44.30719535616571, Q Loss: 65.04144382476807, Actor Loss: -103.27055931091309
Episode 1578: Time: 0.06041836738586426, Total Reward: 53.849246984783285, Q Loss: 95.98463582992554, Actor Loss: -117.04997253417969
Episode 1579: Time: 0.0776224136352539, Total Reward: 72.09312162775953, Q Loss: 104.39527225494385, Actor Loss: -147.04230499267578
Episode 1580: Time: 0.08674788475036621, Total Reward: 81.742313313050753, Q Loss: 139.49627113342285, Actor Loss: -172.643705368042

Episode 1581: Time: 0.07762408256530762, Total Reward: 72.36931916015985, Q Loss: 109.6521167755127, Actor Loss: -155.50607109069824
Episode 1582: Time: 0.06045174598693848, Total Reward: 53.54931797142231, Q Loss: 79.1917495727539, Actor Loss: -112.69323539733887
Episode 1583: Time: 0.07806825637817383, Total Reward: 72.31513173253457, Q Loss: 93.42052412033081, Actor Loss: -155.30056381225586
Episode 1584: Time: 0.060407400131225586, Total Reward: 53.60836731364796, Q Loss: 87.09571504592896, Actor Loss: -123.78190994262695
Episode 1585: Time: 0.06046032905578613, Total Reward: 53.75499801245688, Q Loss: 95.08108901977539, Actor Loss: -119.36093521118164
Episode 1586: Time: 0.07765841484069824, Total Reward: 72.48329810589456, Q Loss: 84.66211223602295, Actor Loss: -152.41633701324463
Episode 1587: Time: 0.060709476470947266, Total Reward: 53.88074707273618, Q Loss: 104.59784603118896, Actor Loss: -126.58035182952881
Episode 1588: Time: 0.052016496658325195, Total Reward: 44.705291510791149, Q Loss: 96.72542572021484, Actor Loss: -109.99497032165527
Episode 1589: Time: 0.05205368995666504, Total Reward: 44.802606001756054, Q Loss: 83.54199934005737, Actor Loss: -100.77063751220703
Episode 1590: Time: 0.07776141166687012, Total Reward: 72.28584073010798, Q Loss: 100.10252332687378, Actor Loss: -158.01323223114014
Episode 1591: Time: 0.07816910743713379, Total Reward: 72.64831858490396, Q Loss: 139.06279277801514, Actor Loss: -159.73205184936523
Episode 1592: Time: 0.07779645919799805, Total Reward: 72.23587148042068, Q Loss: 132.90110540390015, Actor Loss: -155.78903579711914
Episode 1593: Time: 0.060431480407714844, Total Reward: 53.97055421753754, Q Loss: 63.65823984146118, Actor Loss: -118.32589817047119
Episode 1594: Time: 0.06964254379272461, Total Reward: 62.97111679217901, Q Loss: 119.59375047683716, Actor Loss: -146.41988372802734
Episode 1595: Time: 0.0775461196899414, Total Reward: 72.42954933660232, Q Loss: 122.15434074401855, Actor Loss: -163.80840682983398
Episode 1596: Time: 0.060459136962890625, Total Reward: 53.92273875300737, Q Loss: 71.68554925918579, Actor Loss: -123.1372013092041
Episode 1597: Time: 0.06070828437805176, Total Reward: 53.3040532819882, Q Loss: 113.29835796356201, Actor Loss: -137.16650772094727
Episode 1598: Time: 0.07916951179504395, Total Reward: 72.70407245941269, Q Loss: 110.44881582260132, Actor Loss: -164.97104835510254
Episode 1599: Time: 0.06052374839782715, Total Reward: 54.14796267717176, Q Loss: 93.62586736679077, Actor Loss: -131.77731323242188
Validation Mean: 67.95730775121028, Validation Std: 18.311759209567615
saving model
Episode 1600: Time: 0.05232429504394531, Total Reward: 44.759288684834864, Q Loss: 78.11079788208008, Actor Loss: -114.57124900817871
Episode 1601: Time: 0.06074404716491699, Total Reward: 53.57577182842736, Q Loss: 80.07795190811157, Actor Loss: -127.63475227355957
Episode 1602: Time: 0.08679056167602539, Total Reward: 81.92679322100679, Q Loss: 133.03762865066528, Actor Loss: -196.36899948120117
Episode 1603: Time: 0.06057548522949219, Total Reward: 53.77409355099379, Q Loss: 115.08410930633545, Actor Loss: -124.64221477508545
Episode 1604: Time: 0.06899070739746094, Total Reward: 63.014126929117026, Q Loss: 108.86446285247803, Actor Loss: -152.77088165283203
Episode 1605: Time: 0.09534668922424316, Total Reward: 91.20247327290652, Q Loss: 127.92832565307617, Actor Loss: -206.68272399902344
Episode 1606: Time: 0.06041312217712402, Total Reward: 53.32310077411546, Q Loss: 102.41768598556519, Actor Loss: -133.90098762512207
Episode 1607: Time: 0.08640146255493164, Total Reward: 82.02429674153389, Q Loss: 121.13064622879028, Actor Loss: -194.0109405517578

Episode 1608: Time: 0.06087350845336914, Total Reward: 53.18999950801301, Q Loss: 70.69277000427246, Actor Loss: -127.47952651977539
Episode 1609: Time: 0.06053352355957031, Total Reward: 54.249162145327006, Q Loss: 92.19822263717651, Actor Loss: -129.77840614318848
Episode 1610: Time: 0.069208145141660156, Total Reward: 63.19081548356156, Q Loss: 100.36052942276001, Actor Loss: -145.4952688217163
Episode 1611: Time: 0.05181455612182617, Total Reward: 44.2690304709996, Q Loss: 90.52626323699951, Actor Loss: -120.13837432861328
Episode 1612: Time: 0.07790732383728027, Total Reward: 72.19766428513702, Q Loss: 88.49501514434814, Actor Loss: -161.6160249710083
Episode 1613: Time: 0.060461997985839844, Total Reward: 53.981797703877575, Q Loss: 83.84543514251709, Actor Loss: -136.99262046813965
Episode 1614: Time: 0.06899666786193848, Total Reward: 63.004547663094975, Q Loss: 97.25539207458496, Actor Loss: -153.00991821289062
Episode 1615: Time: 0.051816701889038086, Total Reward: 44.71843303423174, Q Loss: 91.0046739578247, Actor Loss: -106.06157302856445
Episode 1616: Time: 0.07825255393981934, Total Reward: 72.17433910470963, Q Loss: 110.470219373703, Actor Loss: -174.35113143920898
Episode 1617: Time: 0.07763099670410156, Total Reward: 72.83989569499789, Q Loss: 105.23039817810059, Actor Loss: -169.74583625793457
Episode 1618: Time: 0.06038546562194824, Total Reward: 53.97810896584, Q Loss: 68.45653438568115, Actor Loss: -139.95798683166504
Episode 1619: Time: 0.07807230949401855, Total Reward: 72.39106297105461, Q Loss: 139.21927070617676, Actor Loss: -179.0127716064453
Episode 1620: Time: 0.06046128273010254, Total Reward: 53.54261885765068, Q Loss: 89.91097450256348, Actor Loss: -135.94747924804688
Episode 1621: Time: 0.060761451721191406, Total Reward: 54.20445797234649, Q Loss: 77.4877290725708, Actor Loss: -143.21934509277344
Episode 1622: Time: 0.06059980392456055, Total Reward: 54.03971060809751, Q Loss: 74.78289031982422, Actor Loss: -134.7307071685791
Episode 1623: Time: 0.0783846378326416, Total Reward: 72.08197560455906, Q Loss: 111.22583866119385, Actor Loss: -187.56545448303223
Episode 1624: Time: 0.06062054634094238, Total Reward: 53.34125191743909, Q Loss: 72.52378845214844, Actor Loss: -134.3531036376953
Episode 1625: Time: 0.15534090995788574, Total Reward: 155.81603478948404, Q Loss: 210.5771999359131, Actor Loss: -372.7425117492676
Episode 1626: Time: 0.0778360366821289, Total Reward: 72.60521192472432, Q Loss: 88.31277275085449, Actor Loss: -179.5505485534668
Episode 1627: Time: 0.06917548179626465, Total Reward: 62.96719574483206, Q Loss: 70.46268653869629, Actor Loss: -149.58773040771484
Episode 1628: Time: 0.06121468544006348, Total Reward: 53.89742257926783, Q Loss: 75.68657493591309, Actor Loss: -143.59593391418457
Episode 1629: Time: 0.1636667251586914, Total Reward: 165.1746968990084, Q Loss: 197.70529556274414, Actor Loss: -383.83984375
Episode 1630: Time: 0.06111788749694824, Total Reward: 53.54860251144694, Q Loss: 95.09961795806885, Actor Loss: -147.1957187652588
Episode 1631: Time: 0.06889867782592773, Total Reward: 63.11667983271769, Q Loss: 95.91260528564453, Actor Loss: -146.98273849487305
Episode 1632: Time: 0.06909513473510742, Total Reward: 63.23996544937342, Q Loss: 79.10017538070679, Actor Loss: -170.66046905517578
Episode 1633: Time: 0.13818907737731934, Total Reward: 137.89622666223818, Q Loss: 191.89765071868896, Actor Loss: -325.5912895202637
Episode 1634: Time: 0.06910395622253418, Total Reward: 62.77806253572075, Q Loss: 96.85609245300293, Actor Loss: -164.95817184448242
Episode 1635: Time: 0.060671329498291016, Total Reward: 53.8909192367851, Q Loss: 106.22754526138306, Actor Loss: -150.39391136169434

Episode 1636: Time: 0.07815217971801758, Total Reward: 72.43529809661541, Q Loss: 119.56538248062134, Actor Loss: -192.46079635620117
Episode 1637: Time: 0.06911849975585938, Total Reward: 62.89971104785944, Q Loss: 89.62191200256348, Actor Loss: -174.958251953125
Episode 1638: Time: 0.051976680755615234, Total Reward: 44.57480527565502, Q Loss: 61.107797622680664, Actor Loss: -124.12686157226562
Episode 1639: Time: 0.06931257247924805, Total Reward: 62.99895433564326, Q Loss: 68.34503030776978, Actor Loss: -162.81060218811035
Episode 1640: Time: 0.061167001724243164, Total Reward: 53.763306333763204, Q Loss: 103.83402061462402, Actor Loss: -147.7597827911377
Episode 1641: Time: 0.060616493225097656, Total Reward: 54.026263363426004, Q Loss: 69.90731048583984, Actor Loss: -147.42865371704102
Episode 1642: Time: 0.06919074058532715, Total Reward: 63.60575765630191, Q Loss: 77.2637448310852, Actor Loss: -166.48984909057617
Episode 1643: Time: 0.06066560745239258, Total Reward: 53.72944425469997, Q Loss: 84.03795862197876, Actor Loss: -149.41732215881348
Episode 1644: Time: 0.08654952049255371, Total Reward: 81.8172672663503, Q Loss: 104.09197044372559, Actor Loss: -212.95740509033203
Episode 1645: Time: 0.06072425842285156, Total Reward: 53.84366160238298, Q Loss: 89.34802436828613, Actor Loss: -147.10073852539062
Episode 1646: Time: 0.06930732727050781, Total Reward: 62.894471706589194, Q Loss: 104.23378038406372, Actor Loss: -166.88347816467285
Episode 1647: Time: 0.060791015625, Total Reward: 53.5445003508545, Q Loss: 64.76883745193481, Actor Loss: -156.43441200256348
Episode 1648: Time: 0.06116747856140137, Total Reward: 53.88560236254616, Q Loss: 73.23564863204956, Actor Loss: -150.52100372314453
Episode 1649: Time: 0.069580078125, Total Reward: 62.9808885918064, Q Loss: 87.2057991027832, Actor Loss: -173.70427322387695
Episode 1650: Time: 0.0693976879119873, Total Reward: 63.13812021697706, Q Loss: 85.27432823181152, Actor Loss: -171.82708168029785
Episode 1651: Time: 0.06075787544250488, Total Reward: 53.60203701678951, Q Loss: 92.73251438140869, Actor Loss: -155.31233406066895
Episode 1652: Time: 0.06121635437011719, Total Reward: 53.31086136526161, Q Loss: 71.9679183959961, Actor Loss: -155.97102165222168
Episode 1653: Time: 0.06955289840698242, Total Reward: 63.17874881737472, Q Loss: 89.42556142807007, Actor Loss: -164.50497436523438
Episode 1654: Time: 0.06087517738342285, Total Reward: 54.01540841031346, Q Loss: 102.51433181762695, Actor Loss: -158.37904930114746
Episode 1655: Time: 0.0612177848815918, Total Reward: 53.919974550902474, Q Loss: 65.72354221343994, Actor Loss: -145.0166187286377
Episode 1656: Time: 0.06933069229125977, Total Reward: 63.10508322884058, Q Loss: 89.40048789978027, Actor Loss: -186.12327194213867
Episode 1657: Time: 0.0693817138671875, Total Reward: 63.03945217572579, Q Loss: 118.99568843841553, Actor Loss: -178.1221408843994
Episode 1658: Time: 0.06993436813354492, Total Reward: 63.128719352068316, Q Loss: 107.21368217468262, Actor Loss: -171.5694923400879
Episode 1659: Time: 0.07847857475280762, Total Reward: 72.81745530006738, Q Loss: 90.85069942474365, Actor Loss: -197.30254745483398
Episode 1660: Time: 0.07819509506225586, Total Reward: 72.45848355574734, Q Loss: 110.90446662902832, Actor Loss: -205.39265060424805
Episode 1661: Time: 0.06132221221923828, Total Reward: 53.354073989011056, Q Loss: 64.30214595794678, Actor Loss: -164.30677604675293
Episode 1662: Time: 0.0955204963684082, Total Reward: 91.06457163584699, Q Loss: 135.75637578964233, Actor Loss: -243.84666061401367
Episode 1663: Time: 0.07924509048461914, Total Reward: 72.40654011172553, Q Loss: 111.84609365463257, Actor Loss: -216.34963035583496

Episode 1664: Time: 0.061335086822509766, Total Reward: 54.14319312484946, Q Loss: 90.26977825164795, Actor Loss: -159.42323303222656
Episode 1665: Time: 0.06951618194580078, Total Reward: 63.28002868293785, Q Loss: 100.66755151748657, Actor Loss: -193.70720100402832
Episode 1666: Time: 0.07816433906555176, Total Reward: 72.39085534152728, Q Loss: 125.45024824142456, Actor Loss: -202.37454414367676
Episode 1667: Time: 0.05236053466796875, Total Reward: 44.45578069242777, Q Loss: 82.61538791656494, Actor Loss: -140.48826599121094
Episode 1668: Time: 0.0953836441040039, Total Reward: 91.43031854642335, Q Loss: 110.79285717010498, Actor Loss: -244.84203720092773
Episode 1669: Time: 0.06944060325622559, Total Reward: 62.66750958846643, Q Loss: 102.28969478607178, Actor Loss: -195.59737968444824
Episode 1670: Time: 0.05267906188964844, Total Reward: 44.732798380030886, Q Loss: 65.77434396743774, Actor Loss: -144.9607334136963
Episode 1671: Time: 0.06956124305725098, Total Reward: 62.71740228786491, Q Loss: 73.2081823348999, Actor Loss: -189.0933074951172
Episode 1672: Time: 0.09537291526794434, Total Reward: 90.8541314687066, Q Loss: 104.76275873184204, Actor Loss: -267.6440620422363
Episode 1673: Time: 0.0611577033996582, Total Reward: 54.09992420351931, Q Loss: 61.26102685928345, Actor Loss: -158.38938903808594
Episode 1674: Time: 0.09557247161865234, Total Reward: 91.49743886052684, Q Loss: 99.40312099456787, Actor Loss: -254.8287582397461
Episode 1675: Time: 0.06062817573547363, Total Reward: 53.629698568085566, Q Loss: 63.289844036102295, Actor Loss: -159.70020294189453
Episode 1676: Time: 0.06114983558654785, Total Reward: 54.02023266382971, Q Loss: 89.7175784111023, Actor Loss: -163.3136100769043
Episode 1677: Time: 0.06946015357971191, Total Reward: 63.0701842557324, Q Loss: 88.82184362411499, Actor Loss: -205.4406337738037
Episode 1678: Time: 0.06966805458068848, Total Reward: 63.05973289910878, Q Loss: 87.2522406578064, Actor Loss: -194.0541172027588
Episode 1679: Time: 0.07911086082458496, Total Reward: 72.09862623109804, Q Loss: 89.4263858795166, Actor Loss: -215.86260223388672
Episode 1680: Time: 0.06107687950134277, Total Reward: 53.77879449577612, Q Loss: 77.82481861114502, Actor Loss: -173.0282802581787
Episode 1681: Time: 0.06961417198181152, Total Reward: 62.643683622584064, Q Loss: 62.765141010284424, Actor Loss: -187.87347984313965
Episode 1682: Time: 0.07875394821166992, Total Reward: 72.15878800235362, Q Loss: 120.54237079620361, Actor Loss: -226.88343048095703
Episode 1683: Time: 0.06096696853637695, Total Reward: 54.02817934101442, Q Loss: 71.47602224349976, Actor Loss: -173.01133918762207
Episode 1684: Time: 0.08677983283996582, Total Reward: 81.33820173110776, Q Loss: 99.90250563621521, Actor Loss: -241.9553508758545
Episode 1685: Time: 0.0615386962890625, Total Reward: 54.047613213119796, Q Loss: 69.55578804016113, Actor Loss: -163.24662590026855
Episode 1686: Time: 0.06104326248168945, Total Reward: 53.717261427795705, Q Loss: 74.26638698577881, Actor Loss: -173.50821113586426
Episode 1687: Time: 0.06980085372924805, Total Reward: 62.71436812160009, Q Loss: 70.42444920539856, Actor Loss: -186.6557159423828
Episode 1688: Time: 0.10482430458068848, Total Reward: 100.38871102093836, Q Loss: 128.49890613555908, Actor Loss: -300.79794120788574
Episode 1689: Time: 0.06113314628601074, Total Reward: 53.51171811592883, Q Loss: 67.7910327911377, Actor Loss: -177.24810409545898
Episode 1690: Time: 0.06966090202331543, Total Reward: 63.21515771188062, Q Loss: 78.14951848983765, Actor Loss: -196.9045238494873
Episode 1691: Time: 0.07900547881262207, Total Reward: 72.59316869404707, Q Loss: 66.62552690505981, Actor Loss: -227.63483238220215

Episode 1692: Time: 0.07829761505126953, Total Reward: 72.4045011085549, Q Loss: 81.93507862091064, Actor Loss: -221.97092628479004
Episode 1693: Time: 0.06089615821838379, Total Reward: 53.42172205562951, Q Loss: 68.34649658203125, Actor Loss: -175.80656051635742
Episode 1694: Time: 0.07037782669067383, Total Reward: 63.49796335080998, Q Loss: 75.02055501937866, Actor Loss: -197.70097732543945
Episode 1695: Time: 0.0609278678894043, Total Reward: 53.519335768324694, Q Loss: 55.17677068710327, Actor Loss: -170.29166984558105
Episode 1696: Time: 0.06089043617248535, Total Reward: 53.98327463929228, Q Loss: 60.2870192527771, Actor Loss: -180.30628204345703
Episode 1697: Time: 0.07883620262145996, Total Reward: 72.1626940758189, Q Loss: 86.91677188873291, Actor Loss: -225.74135208129883
Episode 1698: Time: 0.05240130424499512, Total Reward: 43.95536709805618, Q Loss: 66.5841612815857, Actor Loss: -157.15095901489258
Episode 1699: Time: 0.0524296760559082, Total Reward: 44.5880285876827, Q Loss: 44.81992745399475, Actor Loss: -143.74978828430176
Validation Mean: 65.67798162218905, Validation Std: 13.689758035603717
saving model
Episode 1700: Time: 0.08724570274353027, Total Reward: 81.5872438239144, Q Loss: 88.62077522277832, Actor Loss: -257.0788803100586
Episode 1701: Time: 0.07845401763916016, Total Reward: 72.63247358083936, Q Loss: 89.22898530960083, Actor Loss: -227.20174980163574
Episode 1702: Time: 0.052919864654541016, Total Reward: 44.3605516506761, Q Loss: 70.03716373443604, Actor Loss: -147.3684139251709
Episode 1703: Time: 0.05269432067871094, Total Reward: 44.69664502612782, Q Loss: 51.98299312591553, Actor Loss: -158.32714462280273
Episode 1704: Time: 0.07875871658325195, Total Reward: 72.38829078328386, Q Loss: 79.99156188964844, Actor Loss: -234.62352752685547
Episode 1705: Time: 0.07011079788208008, Total Reward: 63.534677856166546, Q Loss: 73.15426111221313, Actor Loss: -197.01747512817383
Episode 1706: Time: 0.060984134674072266, Total Reward: 54.007350977885864, Q Loss: 66.01540756225586, Actor Loss: -187.27769470214844
Episode 1707: Time: 0.06112241744995117, Total Reward: 53.373764383472555, Q Loss: 75.11185026168823, Actor Loss: -183.82851791381836
Episode 1708: Time: 0.06086587905883789, Total Reward: 53.486709266230065, Q Loss: 70.56010293960571, Actor Loss: -182.51157569885254
Episode 1709: Time: 0.052802324295043945, Total Reward: 44.583500330584556, Q Loss: 70.15527534484863, Actor Loss: -146.5621223449707
Episode 1710: Time: 0.06959939002990723, Total Reward: 62.62236635367429, Q Loss: 83.0280122756958, Actor Loss: -218.962739944458
Episode 1711: Time: 0.0694131851196289, Total Reward: 63.27923107971728, Q Loss: 79.88131260871887, Actor Loss: -197.9579086303711
Episode 1712: Time: 0.06106853485107422, Total Reward: 53.51764517247139, Q Loss: 53.90857219696045, Actor Loss: -178.75735092163086
Episode 1713: Time: 0.06109261512756348, Total Reward: 53.820327360707566, Q Loss: 74.65613603591919, Actor Loss: -183.8536319732666
Episode 1714: Time: 0.06086087226867676, Total Reward: 53.21698000665818, Q Loss: 58.96588897705078, Actor Loss: -180.74957466125488
Episode 1715: Time: 0.06068611145019531, Total Reward: 53.980052978684775, Q Loss: 63.3861083984375, Actor Loss: -191.57217407226562
Episode 1716: Time: 0.052809715270996094, Total Reward: 44.631180468898194, Q Loss: 66.42799186706543, Actor Loss: -162.69572639465332
Episode 1717: Time: 0.06095004081726074, Total Reward: 54.05819690560592, Q Loss: 52.32567477226257, Actor Loss: -183.64001846313477
Episode 1718: Time: 0.060799360275268555, Total Reward: 53.50739650466541, Q Loss: 48.67963123321533, Actor Loss: -190.94465255737305

Episode 1719: Time: 0.052069902420043945, Total Reward: 44.67986644188831, Q Loss: 72.24936485290527, Actor Loss: -161.8946876525879
Episode 1720: Time: 0.06112313270568848, Total Reward: 54.13848299620768, Q Loss: 62.625184059143066, Actor Loss: -191.05022430419922
Episode 1721: Time: 0.06936478614807129, Total Reward: 63.474888280720535, Q Loss: 70.32685232162476, Actor Loss: -216.06417083740234
Episode 1722: Time: 0.06073927879333496, Total Reward: 54.07913100978253, Q Loss: 69.65954685211182, Actor Loss: -184.45763969421387
Episode 1723: Time: 0.052037954330444336, Total Reward: 44.555850443115006, Q Loss: 57.661715507507324, Actor Loss: -162.7781581878662
Episode 1724: Time: 0.06118631362915039, Total Reward: 53.97075255271497, Q Loss: 61.69621181488037, Actor Loss: -192.7170295715332
Episode 1725: Time: 0.09561014175415039, Total Reward: 90.63367363664015, Q Loss: 79.76716208457947, Actor Loss: -299.13378524780273
Episode 1726: Time: 0.06939172744750977, Total Reward: 62.9746602113119, Q Loss: 56.18864631652832, Actor Loss: -208.44689559936523
Episode 1727: Time: 0.07848024368286133, Total Reward: 72.6591406903953, Q Loss: 88.63813591003418, Actor Loss: -240.14139938354492
Episode 1728: Time: 0.09568953514099121, Total Reward: 90.82259280054863, Q Loss: 97.57486200332642, Actor Loss: -296.28787994384766
Episode 1729: Time: 0.14750337600708008, Total Reward: 146.54592486992115, Q Loss: 161.68898248672485, Actor Loss: -460.86612701416016
Episode 1730: Time: 0.06103062629699707, Total Reward: 53.950371705172145, Q Loss: 61.8825249671936, Actor Loss: -200.73072242736816
Episode 1731: Time: 0.13988113403320312, Total Reward: 137.77479835669595, Q Loss: 146.38059258460999, Actor Loss: -437.03667068481445
Episode 1732: Time: 0.07007074356079102, Total Reward: 63.07288827323658, Q Loss: 71.55587720870972, Actor Loss: -239.94231605529785
Episode 1733: Time: 0.07838869094848633, Total Reward: 72.30075942153736, Q Loss: 80.514151096344, Actor Loss: -253.38309288024902
Episode 1734: Time: 0.06154608726501465, Total Reward: 53.88828436399213, Q Loss: 48.85696268081665, Actor Loss: -197.77647399902344
Episode 1735: Time: 0.09558629989624023, Total Reward: 91.23780953869702, Q Loss: 100.52567481994629, Actor Loss: -312.75311279296875
Episode 1736: Time: 0.06963348388671875, Total Reward: 62.72758154857801, Q Loss: 59.35249161720276, Actor Loss: -224.25872421264648
Episode 1737: Time: 0.08771657943725586, Total Reward: 81.66332035204516, Q Loss: 85.07545852661133, Actor Loss: -284.36975479125977
Episode 1738: Time: 0.06094813346862793, Total Reward: 53.697954392295365, Q Loss: 50.52214002609253, Actor Loss: -198.54217147827148
Episode 1739: Time: 0.0608983039855957, Total Reward: 53.99670728498865, Q Loss: 46.168365478515625, Actor Loss: -204.71883583068848
Episode 1740: Time: 0.06955552101135254, Total Reward: 63.36253809532887, Q Loss: 65.48267555236816, Actor Loss: -227.87434005737305
Episode 1741: Time: 0.10454225540161133, Total Reward: 100.58459913144797, Q Loss: 105.98826694488525, Actor Loss: -348.2260856628418
Episode 1742: Time: 0.06079745292663574, Total Reward: 54.04872210484585, Q Loss: 69.62283945083618, Actor Loss: -207.35614585876465
Episode 1743: Time: 0.0610506534576416, Total Reward: 53.7714768696397, Q Loss: 61.24518966674805, Actor Loss: -195.78805541992188
Episode 1744: Time: 0.06100201606750488, Total Reward: 53.40521221619178, Q Loss: 63.49812841415405, Actor Loss: -196.24083137512207
Episode 1745: Time: 0.11312222480773926, Total Reward: 109.67283211941508, Q Loss: 106.99574708938599, Actor Loss: -380.1830291748047
Episode 1746: Time: 0.08665013313293457, Total Reward: 81.97883782358372, Q Loss: 79.05994081497192, Actor Loss: -283.5425853729248

Episode 1747: Time: 0.06957435607910156, Total Reward: 62.90858221977678, Q Loss: 68.37156057357788, Actor Loss: -231.91994094848633
Episode 1748: Time: 0.06979250907897949, Total Reward: 63.20799374626095, Q Loss: 70.06704092025757, Actor Loss: -226.95294761657715
Episode 1749: Time: 0.06961655616760254, Total Reward: 63.20091911126058, Q Loss: 66.05801725387573, Actor Loss: -237.18582916259766
Episode 1750: Time: 0.06958389282226562, Total Reward: 63.23051881292985, Q Loss: 52.719210624694824, Actor Loss: -228.1520004272461
Episode 1751: Time: 0.07861328125, Total Reward: 71.90364286326742, Q Loss: 71.15215516090393, Actor Loss: -262.0927486419678
Episode 1752: Time: 0.07840967178344727, Total Reward: 72.6348848815748, Q Loss: 60.53142070770264, Actor Loss: -245.33334350585938
Episode 1753: Time: 0.06087493896484375, Total Reward: 53.709464504778694, Q Loss: 65.40072822570801, Actor Loss: -206.81528663635254
Episode 1754: Time: 0.07867074012756348, Total Reward: 72.52437440680414, Q Loss: 81.65013456344604, Actor Loss: -273.4928398132324
Episode 1755: Time: 0.06962013244628906, Total Reward: 63.34830630885175, Q Loss: 71.83521461486816, Actor Loss: -225.54108810424805
Episode 1756: Time: 0.07846379280090332, Total Reward: 72.90914952128985, Q Loss: 67.55688571929932, Actor Loss: -276.8271942138672
Episode 1757: Time: 0.0630640983581543, Total Reward: 53.42421878503597, Q Loss: 48.524752616882324, Actor Loss: -195.53736686706543
Episode 1758: Time: 0.052802085876464844, Total Reward: 44.0890894062776, Q Loss: 46.74695062637329, Actor Loss: -179.7146110534668
Episode 1759: Time: 0.06989216804504395, Total Reward: 62.67660951104058, Q Loss: 59.588085889816284, Actor Loss: -225.75922393798828
Episode 1760: Time: 0.06099653244018555, Total Reward: 53.9986152293327, Q Loss: 50.16672134399414, Actor Loss: -220.90917205810547
Episode 1761: Time: 0.061397552490234375, Total Reward: 53.491080201953004, Q Loss: 47.93788456916809, Actor Loss: -203.0981044769287
Episode 1762: Time: 0.05211663246154785, Total Reward: 44.41135090399324, Q Loss: 59.658108711242676, Actor Loss: -180.49612426757812
Episode 1763: Time: 0.0780789852142334, Total Reward: 72.32149623826783, Q Loss: 70.14245414733887, Actor Loss: -261.9129047393799
Episode 1764: Time: 0.06938409805297852, Total Reward: 63.06710968057205, Q Loss: 75.05276250839233, Actor Loss: -247.46321296691895
Episode 1765: Time: 0.06985163688659668, Total Reward: 62.720946095314495, Q Loss: 64.81158447265625, Actor Loss: -225.7879467010498
Episode 1766: Time: 0.07242631912231445, Total Reward: 62.71695922847892, Q Loss: 55.771239280700684, Actor Loss: -244.2018642425537
Episode 1767: Time: 0.0904226303100586, Total Reward: 81.3710063352815, Q Loss: 80.18099546432495, Actor Loss: -291.28647804260254
Episode 1768: Time: 0.0627133846282959, Total Reward: 53.97879672897714, Q Loss: 60.69705772399902, Actor Loss: -209.00419235229492
Episode 1769: Time: 0.05257701873779297, Total Reward: 44.24069386872082, Q Loss: 47.639668464660645, Actor Loss: -178.21226501464844
Episode 1770: Time: 0.05203580856323242, Total Reward: 43.98765807437283, Q Loss: 41.396031856536865, Actor Loss: -187.7130889892578
Episode 1771: Time: 0.061255693435668945, Total Reward: 53.71555506998719, Q Loss: 65.51591062545776, Actor Loss: -204.188720703125
Episode 1772: Time: 0.06138801574707031, Total Reward: 54.06248640775661, Q Loss: 45.75693702697754, Actor Loss: -218.86218070983887
Episode 1773: Time: 0.07217049598693848, Total Reward: 63.45728844592059, Q Loss: 56.47242450714111, Actor Loss: -233.50531578063965
Episode 1774: Time: 0.061704158782958984, Total Reward: 53.429253741944635, Q Loss: 41.72143483161926, Actor Loss: -216.4855556488037

Episode 1775: Time: 0.0704197883605957, Total Reward: 63.163616221574074, Q Loss: 64.60964965820312, Actor Loss: -251.48050498962402
Episode 1776: Time: 0.06109786033630371, Total Reward: 53.73948704253213, Q Loss: 42.634122133255005, Actor Loss: -203.33883094787598
Episode 1777: Time: 0.06141400337219238, Total Reward: 53.95694032489832, Q Loss: 48.04614233970642, Actor Loss: -212.65812492370605
Episode 1778: Time: 0.06968259811401367, Total Reward: 63.233853868590764, Q Loss: 53.3227972984314, Actor Loss: -248.02410125732422
Episode 1779: Time: 0.09615445137023926, Total Reward: 91.1185452220486, Q Loss: 72.25933527946472, Actor Loss: -317.8858337402344
Episode 1780: Time: 0.06986832618713379, Total Reward: 63.188307723624554, Q Loss: 50.98577642440796, Actor Loss: -242.10429573059082
Episode 1781: Time: 0.0694122314453125, Total Reward: 63.33780499642841, Q Loss: 58.106650590896606, Actor Loss: -242.07169342041016
Episode 1782: Time: 0.061331748962402344, Total Reward: 53.948021922022505, Q Loss: 42.080315589904785, Actor Loss: -224.9802646636963
Episode 1783: Time: 0.07022833824157715, Total Reward: 63.28270753308062, Q Loss: 64.72871494293213, Actor Loss: -245.01634407043457
Episode 1784: Time: 0.05237579345703125, Total Reward: 44.65896862245677, Q Loss: 49.65874910354614, Actor Loss: -181.18771743774414
Episode 1785: Time: 0.06952977180480957, Total Reward: 63.34363502851882, Q Loss: 58.34599447250366, Actor Loss: -256.10533142089844
Episode 1786: Time: 0.06150555610656738, Total Reward: 53.22581287298731, Q Loss: 53.77732229232788, Actor Loss: -208.43348503112793
Episode 1787: Time: 0.061272621154785156, Total Reward: 54.04614492917841, Q Loss: 43.86883497238159, Actor Loss: -196.83672523498535
Episode 1788: Time: 0.06101036071777344, Total Reward: 53.70972514907199, Q Loss: 49.01279592514038, Actor Loss: -206.80744743347168
Episode 1789: Time: 0.06080484390258789, Total Reward: 53.64878482957075, Q Loss: 51.22511386871338, Actor Loss: -213.00810623168945
Episode 1790: Time: 0.07000350952148438, Total Reward: 62.875903679199105, Q Loss: 48.56835746765137, Actor Loss: -237.04322814941406
Episode 1791: Time: 0.06154656410217285, Total Reward: 53.68554723744003, Q Loss: 44.31896495819092, Actor Loss: -220.67693519592285
Episode 1792: Time: 0.06973743438720703, Total Reward: 62.98284181466808, Q Loss: 56.764700174331665, Actor Loss: -242.08137893676758
Episode 1793: Time: 0.07030200958251953, Total Reward: 63.29543504841737, Q Loss: 63.810218811035156, Actor Loss: -253.90781211853027
Episode 1794: Time: 0.06143665313720703, Total Reward: 54.24846968699282, Q Loss: 47.52618932723999, Actor Loss: -223.0766887664795
Episode 1795: Time: 0.07837367057800293, Total Reward: 72.26936373017253, Q Loss: 62.57951784133911, Actor Loss: -270.54124641418457
Episode 1796: Time: 0.06115126609802246, Total Reward: 53.805049407699215, Q Loss: 38.03048539161682, Actor Loss: -219.91004943847656
Episode 1797: Time: 0.06139874458312988, Total Reward: 53.60518854569476, Q Loss: 41.8972053527832, Actor Loss: -206.53371238708496
Episode 1798: Time: 0.052340030670166016, Total Reward: 44.732616392299605, Q Loss: 32.76501178741455, Actor Loss: -189.05001068115234
Episode 1799: Time: 0.06100320816040039, Total Reward: 53.63280166464184, Q Loss: 52.80435037612915, Actor Loss: -217.85371208190918
Validation Mean: 66.61245524471214, Validation Std: 21.162387896946964
saving model
Episode 1800: Time: 0.07977294921875, Total Reward: 72.12228899368348, Q Loss: 63.31193494796753, Actor Loss: -274.4323787689209
Episode 1801: Time: 0.12299370765686035, Total Reward: 119.17819100329599, Q Loss: 98.43594217300415, Actor Loss: -438.81843757629395

Episode 1802: Time: 0.06131553649902344, Total Reward: 53.88386108878164, Q Loss: 41.375786542892456, Actor Loss: -208.5749111175537
Episode 1803: Time: 0.15708088874816895, Total Reward: 156.268222568476, Q Loss: 112.53916335105896, Actor Loss: -564.6646823883057
Episode 1804: Time: 0.06104397773742676, Total Reward: 54.171647258370896, Q Loss: 58.21128988265991, Actor Loss: -227.03252029418945
Episode 1805: Time: 0.06942892074584961, Total Reward: 62.92762950969744, Q Loss: 50.891067028045654, Actor Loss: -247.9299545288086
Episode 1806: Time: 0.10453295707702637, Total Reward: 100.31135570184681, Q Loss: 73.62978196144104, Actor Loss: -369.96646308898926
Episode 1807: Time: 0.07828640937805176, Total Reward: 72.20524811005875, Q Loss: 52.64851379394531, Actor Loss: -262.30089569091797
Episode 1808: Time: 0.06067204475402832, Total Reward: 53.54116235087347, Q Loss: 47.972636699676514, Actor Loss: -227.05714797973633
Episode 1809: Time: 0.07003426551818848, Total Reward: 63.00291929097984, Q Loss: 50.59707832336426, Actor Loss: -252.00969314575195
Episode 1810: Time: 0.06937813758850098, Total Reward: 62.796571929754045, Q Loss: 40.17796206474304, Actor Loss: -238.329984664917
Episode 1811: Time: 0.06079602241516113, Total Reward: 54.106183022072756, Q Loss: 52.151094913482666, Actor Loss: -229.31462287902832
Episode 1812: Time: 0.09553766250610352, Total Reward: 90.97014436762562, Q Loss: 84.90060782432556, Actor Loss: -351.9057960510254
Episode 1813: Time: 0.0782170295715332, Total Reward: 72.57311352952205, Q Loss: 60.55648422241211, Actor Loss: -287.66760635375977
Episode 1814: Time: 0.07815742492675781, Total Reward: 72.71111128434265, Q Loss: 60.347002029418945, Actor Loss: -283.63377380371094
Episode 1815: Time: 0.07018399238586426, Total Reward: 62.51476971812339, Q Loss: 57.509889125823975, Actor Loss: -255.69048690795898
Episode 1816: Time: 0.10442733764648438, Total Reward: 100.24498609928357, Q Loss: 92.68834590911865, Actor Loss: -389.61923027038574
Episode 1817: Time: 0.06084489822387695, Total Reward: 53.93400762299872, Q Loss: 43.43633413314819, Actor Loss: -212.59597206115723
Episode 1818: Time: 0.061541080474853516, Total Reward: 53.98526612785209, Q Loss: 34.592204570770264, Actor Loss: -221.37780570983887
Episode 1819: Time: 0.12135648727416992, Total Reward: 119.1484240229976, Q Loss: 96.86256885528564, Actor Loss: -446.2555751800537
Episode 1820: Time: 0.06961846351623535, Total Reward: 62.64897830085947, Q Loss: 51.005942821502686, Actor Loss: -247.98114585876465
Episode 1821: Time: 0.08728218078613281, Total Reward: 81.83734031597669, Q Loss: 64.16560792922974, Actor Loss: -313.6159381866455
Episode 1822: Time: 0.06106209754943848, Total Reward: 53.98401626007753, Q Loss: 40.87423849105835, Actor Loss: -227.5136947631836
Episode 1823: Time: 0.06954765319824219, Total Reward: 62.6139061133491, Q Loss: 56.94208574295044, Actor Loss: -252.58132934570312
Episode 1824: Time: 0.1823434829711914, Total Reward: 184.63168208395203, Q Loss: 145.89174437522888, Actor Loss: -679.942533493042
Episode 1825: Time: 0.06938338279724121, Total Reward: 62.63607908590248, Q Loss: 53.46652960777283, Actor Loss: -262.85954093933105
Episode 1826: Time: 0.06942272186279297, Total Reward: 62.96255711126589, Q Loss: 41.03165888786316, Actor Loss: -260.60583877563477
Episode 1827: Time: 0.07849335670471191, Total Reward: 72.39705798064772, Q Loss: 61.61569023132324, Actor Loss: -304.3552494049072
Episode 1828: Time: 0.07828617095947266, Total Reward: 72.79495268844941, Q Loss: 57.67014980316162, Actor Loss: -289.14887619018555
Episode 1829: Time: 0.08647465705871582, Total Reward: 81.60711099926101, Q Loss: 54.43404245376587, Actor Loss: -329.0943660736084

Episode 1830: Time: 0.07868170738220215, Total Reward: 72.62601294208766, Q Loss: 40.15549969673157, Actor Loss: -297.1326541900635
Episode 1831: Time: 0.060884952545166016, Total Reward: 54.00317518635089, Q Loss: 41.394667625427246, Actor Loss: -229.79313278198242
Episode 1832: Time: 0.07797074317932129, Total Reward: 72.46909555368651, Q Loss: 56.610429763793945, Actor Loss: -285.14280700683594
Episode 1833: Time: 0.06964945793151855, Total Reward: 63.183325793600545, Q Loss: 37.32572793960571, Actor Loss: -257.14442443847656
Episode 1834: Time: 0.08655142784118652, Total Reward: 82.12787775648174, Q Loss: 61.09022808074951, Actor Loss: -319.2135696411133
Episode 1835: Time: 0.06938910484313965, Total Reward: 63.30028112504287, Q Loss: 47.35403084754944, Actor Loss: -262.1178035736084
Episode 1836: Time: 0.061396121978759766, Total Reward: 53.92590754159087, Q Loss: 30.494794130325317, Actor Loss: -212.8743438720703
Episode 1837: Time: 0.06941342353820801, Total Reward: 62.78233537368732, Q Loss: 40.15657019615173, Actor Loss: -257.6032180786133
Episode 1838: Time: 0.08676648139953613, Total Reward: 82.10124507677244, Q Loss: 59.28110599517822, Actor Loss: -317.2852096557617
Episode 1839: Time: 0.07009339332580566, Total Reward: 63.061526581177354, Q Loss: 43.36469864845276, Actor Loss: -261.6476001739502
Episode 1840: Time: 0.2252352237701416, Total Reward: 229.88174481876635, Q Loss: 163.05555033683777, Actor Loss: -830.8953094482422
Episode 1841: Time: 0.06959033012390137, Total Reward: 62.85332795167163, Q Loss: 52.61763048171997, Actor Loss: -262.5040225982666
Episode 1842: Time: 0.07837915420532227, Total Reward: 72.53313462576602, Q Loss: 53.43632411956787, Actor Loss: -304.7535762786865
Episode 1843: Time: 0.06984925270080566, Total Reward: 63.27948390164073, Q Loss: 47.89950942993164, Actor Loss: -255.37012672424316
Episode 1844: Time: 0.07816720008850098, Total Reward: 72.48697078113835, Q Loss: 52.81980919837952, Actor Loss: -279.52919578552246
Episode 1845: Time: 0.06945943832397461, Total Reward: 63.16743831092448, Q Loss: 43.58674502372742, Actor Loss: -264.088529586792
Episode 1846: Time: 0.06998562812805176, Total Reward: 62.751672552268964, Q Loss: 37.37932825088501, Actor Loss: -267.63781547546387
Episode 1847: Time: 0.06944704055786133, Total Reward: 62.918489173146575, Q Loss: 42.52855443954468, Actor Loss: -270.95593643188477
Episode 1848: Time: 0.06949925422668457, Total Reward: 63.12715419042116, Q Loss: 41.57147407531738, Actor Loss: -255.99286079406738
Episode 1849: Time: 0.06982135772705078, Total Reward: 63.501618070389405, Q Loss: 48.75795102119446, Actor Loss: -266.8566246032715
Episode 1850: Time: 0.07820892333984375, Total Reward: 72.30125487798591, Q Loss: 59.69788312911987, Actor Loss: -296.62073707580566
Episode 1851: Time: 0.06934905052185059, Total Reward: 62.815886416301474, Q Loss: 47.13422894477844, Actor Loss: -260.05771255493164
Episode 1852: Time: 0.061026573181152344, Total Reward: 53.823461655699646, Q Loss: 44.42015528678894, Actor Loss: -235.03904914855957
Episode 1853: Time: 0.060752153396606445, Total Reward: 54.12349112813891, Q Loss: 56.81106472015381, Actor Loss: -235.54368209838867
Episode 1854: Time: 0.06091904640197754, Total Reward: 53.98987743736948, Q Loss: 42.889415979385376, Actor Loss: -226.65459632873535
Episode 1855: Time: 0.0607759952545166, Total Reward: 54.185288372316336, Q Loss: 46.82929515838623, Actor Loss: -231.11125373840332
Episode 1856: Time: 0.052741050720214844, Total Reward: 44.26913639957976, Q Loss: 40.50477457046509, Actor Loss: -204.86204528808594
Episode 1857: Time: 0.060791730880737305, Total Reward: 53.736377049126645, Q Loss: 43.54447650909424, Actor Loss: -238.13268089294434

Episode 1858: Time: 0.06999659538269043, Total Reward: 63.0756606489175, Q Loss: 44.400370836257935, Actor Loss: -268.9937915802002
Episode 1859: Time: 0.06090950965881348, Total Reward: 53.649711941868574, Q Loss: 45.06013035774231, Actor Loss: -230.2797679901123
Episode 1860: Time: 0.052752017974853516, Total Reward: 44.13737272599497, Q Loss: 37.6086802482605, Actor Loss: -203.99414443969727
Episode 1861: Time: 0.08697652816772461, Total Reward: 81.52286019473019, Q Loss: 61.139994859695435, Actor Loss: -330.40431022644043
Episode 1862: Time: 0.0781850814819336, Total Reward: 72.83808059375393, Q Loss: 70.21456527709961, Actor Loss: -297.7637405395508
Episode 1863: Time: 0.05330920219421387, Total Reward: 44.79236313121641, Q Loss: 34.88023662567139, Actor Loss: -197.9167251586914
Episode 1864: Time: 0.06963062286376953, Total Reward: 63.450630158257596, Q Loss: 42.71035552024841, Actor Loss: -268.381404876709
Episode 1865: Time: 0.07786750793457031, Total Reward: 72.38826784151325, Q Loss: 45.42971968650818, Actor Loss: -303.53855895996094
Episode 1866: Time: 0.052642107009887695, Total Reward: 44.75990913779644, Q Loss: 38.881951332092285, Actor Loss: -205.3912239074707
Episode 1867: Time: 0.06994938850402832, Total Reward: 63.386077730746464, Q Loss: 50.41530442237854, Actor Loss: -260.831750869751
Episode 1868: Time: 0.12139773368835449, Total Reward: 119.3450128343776, Q Loss: 92.05925416946411, Actor Loss: -481.1459903717041
Episode 1869: Time: 0.07002973556518555, Total Reward: 63.38944689520672, Q Loss: 57.78846025466919, Actor Loss: -270.1708641052246
Episode 1870: Time: 0.06088709831237793, Total Reward: 53.657589391823606, Q Loss: 46.91340351104736, Actor Loss: -237.04139709472656
Episode 1871: Time: 0.06931304931640625, Total Reward: 63.03119546860928, Q Loss: 45.476354360580444, Actor Loss: -272.8215084075928
Episode 1872: Time: 0.07837486267089844, Total Reward: 72.41781328744942, Q Loss: 56.135926246643066, Actor Loss: -312.85026931762695
Episode 1873: Time: 0.09522795677185059, Total Reward: 91.12415434039907, Q Loss: 65.64623475074768, Actor Loss: -380.7582244873047
Episode 1874: Time: 0.07820987701416016, Total Reward: 72.63644158680758, Q Loss: 68.78590250015259, Actor Loss: -312.52331161499023
Episode 1875: Time: 0.08711600303649902, Total Reward: 81.81119122323497, Q Loss: 58.40773296356201, Actor Loss: -338.2725086212158
Episode 1876: Time: 0.06989479064941406, Total Reward: 63.50286213174276, Q Loss: 43.207284688949585, Actor Loss: -271.70870780944824
Episode 1877: Time: 0.07834935188293457, Total Reward: 72.41723901972856, Q Loss: 52.11583089828491, Actor Loss: -299.68139839172363
Episode 1878: Time: 0.10477328300476074, Total Reward: 100.5133595823378, Q Loss: 69.4872534275055, Actor Loss: -407.7646427154541
Episode 1879: Time: 0.06950640678405762, Total Reward: 63.22852406036028, Q Loss: 41.46534299850464, Actor Loss: -273.4876289367676
Episode 1880: Time: 0.0608670711517334, Total Reward: 53.31572456408335, Q Loss: 47.01350927352905, Actor Loss: -243.24376678466797
Episode 1881: Time: 0.06079888343811035, Total Reward: 53.68899716404096, Q Loss: 41.4203565120697, Actor Loss: -244.9077262878418
Episode 1882: Time: 0.08722949028015137, Total Reward: 81.6300645240935, Q Loss: 60.421905517578125, Actor Loss: -344.1232433319092
Episode 1883: Time: 0.052106618881225586, Total Reward: 44.4767370311072, Q Loss: 30.700196743011475, Actor Loss: -208.45634841918945
Episode 1884: Time: 0.0693511962890625, Total Reward: 63.32411395361706, Q Loss: 50.099700927734375, Actor Loss: -259.92426109313965
Episode 1885: Time: 0.08708691596984863, Total Reward: 81.41365143405744, Q Loss: 56.002556371688843, Actor Loss: -345.4563846588135

Episode 1886: Time: 0.07805752754211426, Total Reward: 72.93585735789976, Q
Loss: 47.78083324432373, Actor Loss: -306.0116195678711
Episode 1887: Time: 0.156325101852417, Total Reward: 156.61439999508255, Q L
oss: 116.3835802078247, Actor Loss: -615.6415863037109
Episode 1888: Time: 0.0782926082611084, Total Reward: 72.78540834659687, Q L
oss: 57.36582851409912, Actor Loss: -314.92449951171875
Episode 1889: Time: 0.07795071601867676, Total Reward: 72.36820748250352, Q
Loss: 62.21268606185913, Actor Loss: -327.92578887939453
Episode 1890: Time: 0.07007622718811035, Total Reward: 63.482873251935914, Q
Loss: 45.467570781707764, Actor Loss: -275.4633388519287
Episode 1891: Time: 0.06945538520812988, Total Reward: 63.161275190119525, Q
Loss: 49.95789384841919, Actor Loss: -282.7305507659912
Episode 1892: Time: 0.07847356796264648, Total Reward: 72.91164759499887, Q
Loss: 52.411879539489746, Actor Loss: -307.6711120605469
Episode 1893: Time: 0.0700540542602539, Total Reward: 63.27097077622928, Q L
oss: 50.17476749420166, Actor Loss: -278.29753494262695
Episode 1894: Time: 0.06071138381958008, Total Reward: 54.14085855548776, Q
Loss: 36.35441279411316, Actor Loss: -229.10403633117676
Episode 1895: Time: 0.06946587562561035, Total Reward: 63.4493790814658, Q L
oss: 57.93948984146118, Actor Loss: -262.82151794433594
Episode 1896: Time: 0.12176322937011719, Total Reward: 119.09240399308013, Q
Loss: 92.7183609008789, Actor Loss: -477.7194766998291
Episode 1897: Time: 0.07828712463378906, Total Reward: 72.76508130748131, Q
Loss: 62.94375038146973, Actor Loss: -297.4875717163086
Episode 1898: Time: 0.06084728240966797, Total Reward: 54.06585240469603, Q
Loss: 38.62073636054993, Actor Loss: -248.1450309753418
Episode 1899: Time: 0.07005906105041504, Total Reward: 62.73494933643838, Q
Loss: 41.43980169296265, Actor Loss: -272.3445129394531
Validation Mean: 69.97519605365711, Validation Std: 22.304320259579455
saving model
Episode 1900: Time: 0.08738040924072266, Total Reward: 81.48653378219936, Q
Loss: 63.306039810180664, Actor Loss: -358.82414627075195
Episode 1901: Time: 0.06949424743652344, Total Reward: 63.04524671401294, Q
Loss: 44.41988682746887, Actor Loss: -290.0283908843994
Episode 1902: Time: 0.061489105224609375, Total Reward: 54.124210973601826,
Q Loss: 40.31177759170532, Actor Loss: -241.92733764648438
Episode 1903: Time: 0.09568023681640625, Total Reward: 91.61862944086734, Q
Loss: 63.603689193725586, Actor Loss: -391.5776309967041
Episode 1904: Time: 0.07842111587524414, Total Reward: 72.78939497473867, Q
Loss: 54.14637565612793, Actor Loss: -304.99407958984375
Episode 1905: Time: 0.0963292121887207, Total Reward: 90.83786568004506, Q L
oss: 59.90595865249634, Actor Loss: -377.93890953063965
Episode 1906: Time: 0.07861566543579102, Total Reward: 72.13934558411312, Q
Loss: 60.51518487930298, Actor Loss: -299.75102615356445
Episode 1907: Time: 0.060853004455566406, Total Reward: 53.67860376714018, Q
Loss: 58.97578549385071, Actor Loss: -246.44720840454102
Episode 1908: Time: 0.19165706634521484, Total Reward: 193.15276002770838, Q
Loss: 150.6025881767273, Actor Loss: -771.2302322387695
Episode 1909: Time: 0.06968927383422852, Total Reward: 63.36489546303845, Q
Loss: 54.22997570037842, Actor Loss: -285.49878120422363
Episode 1910: Time: 0.06940340995788574, Total Reward: 63.15135450202625, Q
Loss: 39.048750162124634, Actor Loss: -279.248104095459
Episode 1911: Time: 0.14796924591064453, Total Reward: 146.49022731626252, Q
Loss: 93.55738568305969, Actor Loss: -582.3942985534668
Episode 1912: Time: 0.06969022750854492, Total Reward: 63.53363956719128, Q
Loss: 44.36550283432007, Actor Loss: -280.22239112854004

Episode 1913: Time: 0.0782308578491211, Total Reward: 72.29477327662951, Q Loss: 50.625576972961426, Actor Loss: -302.33690071105957
Episode 1914: Time: 0.0701894760131836, Total Reward: 63.43163888583427, Q Loss: 45.2696852684021, Actor Loss: -283.7044620513916
Episode 1915: Time: 0.0783538818359375, Total Reward: 72.8578537903527, Q Loss: 50.256858825683594, Actor Loss: -305.3660430908203
Episode 1916: Time: 0.06956672668457031, Total Reward: 63.61995161190763, Q Loss: 47.51461100578308, Actor Loss: -259.1920967102051
Episode 1917: Time: 0.07016491889953613, Total Reward: 63.401152623285164, Q Loss: 47.22637867927551, Actor Loss: -285.10980224609375
Episode 1918: Time: 0.06103324890136719, Total Reward: 53.86621196662108, Q Loss: 46.526498317718506, Actor Loss: -242.2978744506836
Episode 1919: Time: 0.0695955753326416, Total Reward: 63.20470506135321, Q Loss: 46.82255554199219, Actor Loss: -273.1304988861084
Episode 1920: Time: 0.06978297233581543, Total Reward: 63.20271395894552, Q Loss: 39.92241382598877, Actor Loss: -273.39075660705566
Episode 1921: Time: 0.069685697555554199, Total Reward: 62.90410679119117, Q Loss: 42.043034076690674, Actor Loss: -287.77845001220703
Episode 1922: Time: 0.06963634490966797, Total Reward: 62.959965469190706, Q Loss: 59.632511615753174, Actor Loss: -289.3235206604004
Episode 1923: Time: 0.06238579750061035, Total Reward: 54.25921259274531, Q Loss: 39.74453639984131, Actor Loss: -241.19888305664062
Episode 1924: Time: 0.08700680732727051, Total Reward: 81.7271850827524, Q Loss: 60.412410259246826, Actor Loss: -350.99232292175293
Episode 1925: Time: 0.07813024520874023, Total Reward: 72.63756342942737, Q Loss: 64.41102981567383, Actor Loss: -314.86559677124023
Episode 1926: Time: 0.0699625015258789, Total Reward: 63.29623726960114, Q Loss: 48.503228425979614, Actor Loss: -291.69942474365234
Episode 1927: Time: 0.06102776527404785, Total Reward: 54.21726830972086, Q Loss: 37.87206792831421, Actor Loss: -230.22415733337402
Episode 1928: Time: 0.06978654861450195, Total Reward: 63.07814158737193, Q Loss: 50.94461727142334, Actor Loss: -282.21456146240234
Episode 1929: Time: 0.07884669303894043, Total Reward: 72.35035741396288, Q Loss: 65.60408735275269, Actor Loss: -327.85004234313965
Episode 1930: Time: 0.07826089859008789, Total Reward: 72.42109618651843, Q Loss: 48.783761739730835, Actor Loss: -335.075138092041
Episode 1931: Time: 0.08676552772521973, Total Reward: 81.89589772999688, Q Loss: 69.437180519104, Actor Loss: -348.9693908691406
Episode 1932: Time: 0.061246395111083984, Total Reward: 54.12311455192692, Q Loss: 44.242165327072144, Actor Loss: -241.2453784942627
Episode 1933: Time: 0.07825565338134766, Total Reward: 72.62989681241235, Q Loss: 50.2009072303772, Actor Loss: -318.6409969329834
Episode 1934: Time: 0.08694911003112793, Total Reward: 82.16350804771625, Q Loss: 66.38520622253418, Actor Loss: -367.53100204467773
Episode 1935: Time: 0.08770322799682617, Total Reward: 81.6405117719428, Q Loss: 71.8685200214386, Actor Loss: -364.9376754760742
Episode 1936: Time: 0.0784919261932373, Total Reward: 72.4306814959297, Q Loss: 54.10541343688965, Actor Loss: -317.587194442749
Episode 1937: Time: 0.0696249008178711, Total Reward: 63.36068224685941, Q Loss: 44.42744779586792, Actor Loss: -270.05876541137695
Episode 1938: Time: 0.07876467704772949, Total Reward: 72.14037365576516, Q Loss: 48.34994697570801, Actor Loss: -304.502836227417
Episode 1939: Time: 0.0699305534362793, Total Reward: 63.20800522261548, Q Loss: 38.89093017578125, Actor Loss: -277.6566104888916
Episode 1940: Time: 0.07021355628967285, Total Reward: 63.18523845106913, Q Loss: 58.97063159942627, Actor Loss: -296.4003677368164

Episode 1941: Time: 0.10519599914550781, Total Reward: 100.53480518441457, Q Loss: 76.59631490707397, Actor Loss: -427.58763694763184
Episode 1942: Time: 0.06976866722106934, Total Reward: 63.253763075245686, Q Loss: 43.81900644302368, Actor Loss: -282.7810287475586
Episode 1943: Time: 0.06113600730895996, Total Reward: 54.27367941180146, Q Loss: 47.999361991882324, Actor Loss: -249.35888290405273
Episode 1944: Time: 0.07910442352294922, Total Reward: 72.69163193227881, Q Loss: 58.857802629470825, Actor Loss: -317.50238609313965
Episode 1945: Time: 0.061723947525024414, Total Reward: 53.77313417015381, Q Loss: 45.029069900512695, Actor Loss: -240.47557830810547
Episode 1946: Time: 0.07836151123046875, Total Reward: 73.01996017559833, Q Loss: 53.812986850738525, Actor Loss: -323.5541534423828
Episode 1947: Time: 0.0703730583190918, Total Reward: 63.005452598983204, Q Loss: 45.96380567550659, Actor Loss: -296.5829277038574
Episode 1948: Time: 0.06986474990844727, Total Reward: 63.27630054096736, Q Loss: 66.08890771865845, Actor Loss: -279.2684383392334
Episode 1949: Time: 0.06984782218933105, Total Reward: 63.243410005858976, Q Loss: 46.8399338722229, Actor Loss: -291.78242683410645
Episode 1950: Time: 0.06153535842895508, Total Reward: 53.71163002367972, Q Loss: 47.44892501831055, Actor Loss: -257.7438850402832
Episode 1951: Time: 0.0610814094543457, Total Reward: 53.99705945655291, Q Loss: 50.965142011642456, Actor Loss: -249.63445472717285
Episode 1952: Time: 0.06986784934997559, Total Reward: 63.17362043408013, Q Loss: 49.46177291870117, Actor Loss: -290.9879665374756
Episode 1953: Time: 0.19167304039001465, Total Reward: 193.06960728777372, Q Loss: 134.4791374206543, Actor Loss: -789.3371696472168
Episode 1954: Time: 0.06971049308776855, Total Reward: 63.04471658698668, Q Loss: 48.90464401245117, Actor Loss: -286.3025093078613
Episode 1955: Time: 0.08692431449890137, Total Reward: 82.00705929872927, Q Loss: 72.79461288452148, Actor Loss: -355.7638397216797
Episode 1956: Time: 0.061513423919677734, Total Reward: 54.0660620579093, Q Loss: 41.04595470428467, Actor Loss: -249.04461669921875
Episode 1957: Time: 0.0783989429473877, Total Reward: 72.57402456178954, Q Loss: 73.42176151275635, Actor Loss: -334.5732307434082
Episode 1958: Time: 0.06964397430419922, Total Reward: 63.18505324859312, Q Loss: 44.143293380737305, Actor Loss: -293.0850601196289
Episode 1959: Time: 0.07866668701171875, Total Reward: 72.85108464918468, Q Loss: 58.75695276260376, Actor Loss: -317.6342315673828
Episode 1960: Time: 0.07844209671020508, Total Reward: 72.89959853892998, Q Loss: 57.82328653335571, Actor Loss: -330.82873153686523
Episode 1961: Time: 0.07824277877807617, Total Reward: 72.24803890977945, Q Loss: 63.59461307525635, Actor Loss: -325.15973472595215
Episode 1962: Time: 0.061136484146118164, Total Reward: 54.177625860238656, Q Loss: 40.27875590324402, Actor Loss: -251.16804885864258
Episode 1963: Time: 0.11286520957946777, Total Reward: 109.70907934337195, Q Loss: 88.96773982048035, Actor Loss: -445.6591167449951
Episode 1964: Time: 0.09567999839782715, Total Reward: 91.30137964762001, Q Loss: 68.86383509635925, Actor Loss: -383.5948829650879
Episode 1965: Time: 0.05281496047973633, Total Reward: 44.346427387458135, Q Loss: 34.680771350860596, Actor Loss: -207.30940055847168
Episode 1966: Time: 0.061612844467163086, Total Reward: 53.96469034067253, Q Loss: 47.2069206237793, Actor Loss: -265.16135597229004
Episode 1967: Time: 0.07014608383178711, Total Reward: 63.232627243709054, Q Loss: 52.408801555633545, Actor Loss: -288.00462913513184
Episode 1968: Time: 0.06189393997192383, Total Reward: 53.91869103873363, Q Loss: 58.025757789611816, Actor Loss: -259.19680976867676

Episode 1969: Time: 0.06992697715759277, Total Reward: 63.45269825549037, Q Loss: 54.84378910064697, Actor Loss: -288.1634826660156
Episode 1970: Time: 0.07847476005554199, Total Reward: 72.32482435354027, Q Loss: 59.852569341659546, Actor Loss: -336.58371353149414
Episode 1971: Time: 0.07006692886352539, Total Reward: 63.20561138510143, Q Loss: 64.2461895942688, Actor Loss: -294.092830657959
Episode 1972: Time: 0.05235576629638672, Total Reward: 44.664582205277526, Q Loss: 41.42337512969971, Actor Loss: -205.8716278076172
Episode 1973: Time: 0.07824039459228516, Total Reward: 72.5218226082302, Q Loss: 59.47454309463501, Actor Loss: -322.129150390625
Episode 1974: Time: 0.06957411766052246, Total Reward: 63.30111013148167, Q Loss: 62.155816078186035, Actor Loss: -296.5762176513672
Episode 1975: Time: 0.07825398445129395, Total Reward: 72.71197503989367, Q Loss: 50.54662823677063, Actor Loss: -334.1729202270508
Episode 1976: Time: 0.1390674114227295, Total Reward: 137.91180832452227, Q Loss: 119.66912794113159, Actor Loss: -557.3683948516846
Episode 1977: Time: 0.0695350170135498, Total Reward: 63.417413435887255, Q Loss: 45.5216908454895, Actor Loss: -284.5229301452637
Episode 1978: Time: 0.0695488452911377, Total Reward: 62.99343237575952, Q Loss: 47.355939626693726, Actor Loss: -296.55301666259766
Episode 1979: Time: 0.07849264144897461, Total Reward: 72.7128677591062, Q Loss: 50.37619185447693, Actor Loss: -319.6776008605957
Episode 1980: Time: 0.07827353477478027, Total Reward: 72.36000307391542, Q Loss: 61.37588691711426, Actor Loss: -309.4922065734863
Episode 1981: Time: 0.08701300621032715, Total Reward: 81.6545002192578, Q Loss: 60.73182249069214, Actor Loss: -358.38579750061035
Episode 1982: Time: 0.061423301696777344, Total Reward: 53.76270299417892, Q Loss: 52.024513721466064, Actor Loss: -262.21325302124023
Episode 1983: Time: 0.060950279235839844, Total Reward: 53.68611950378511, Q Loss: 44.13101601600647, Actor Loss: -253.26680755615234
Episode 1984: Time: 0.0782308578491211, Total Reward: 72.7321822428958, Q Loss: 65.8142957687378, Actor Loss: -315.81096267700195
Episode 1985: Time: 0.08746981620788574, Total Reward: 81.84202271518119, Q Loss: 56.659337520599365, Actor Loss: -379.0527458190918
Episode 1986: Time: 0.08739066123962402, Total Reward: 81.83435521950118, Q Loss: 65.24868154525757, Actor Loss: -367.4087257385254
Episode 1987: Time: 0.07061314582824707, Total Reward: 63.57778607023993, Q Loss: 56.93433237075806, Actor Loss: -294.5511245727539
Episode 1988: Time: 0.07920360565185547, Total Reward: 72.50062495275078, Q Loss: 73.57156085968018, Actor Loss: -336.808349609375
Episode 1989: Time: 0.061875104904174805, Total Reward: 54.20995492232095, Q Loss: 46.31796741485596, Actor Loss: -250.4930877685547
Episode 1990: Time: 0.08730649948120117, Total Reward: 81.94120189628677, Q Loss: 64.46250987052917, Actor Loss: -349.1941375732422
Episode 1991: Time: 0.07065200805664062, Total Reward: 63.012918770864594, Q Loss: 54.205941677093506, Actor Loss: -292.15049743652344
Episode 1992: Time: 0.12248682975769043, Total Reward: 119.50056102137783, Q Loss: 92.10608696937561, Actor Loss: -518.9528770446777
Episode 1993: Time: 0.1572253704071045, Total Reward: 155.75118641250418, Q Loss: 117.73241996765137, Actor Loss: -666.169807434082
Episode 1994: Time: 0.08689093589782715, Total Reward: 81.6132962115731, Q Loss: 78.87528228759766, Actor Loss: -371.0468864440918
Episode 1995: Time: 0.07833695411682129, Total Reward: 72.47840972759948, Q Loss: 69.55435228347778, Actor Loss: -341.5751075744629
Episode 1996: Time: 0.07034754753112793, Total Reward: 63.18148579343858, Q Loss: 56.509604930877686, Actor Loss: -300.74404525756836

Episode 1997: Time: 0.07832169552775879, Total Reward: 72.66479710891012, Q Loss: 60.869325399398804, Actor Loss: -331.16816329956055
Episode 1998: Time: 0.0696568489074707, Total Reward: 63.182790783589, Q Loss: 53.86927938461304, Actor Loss: -295.6451835632324
Episode 1999: Time: 0.0702211856842041, Total Reward: 62.803747213452766, Q Loss: 57.857491970062256, Actor Loss: -296.7880401611328
Validation Mean: 75.86952055512833, Validation Std: 29.643762966721095
saving model
Episode 2000: Time: 0.07051897048950195, Total Reward: 63.18560382247106, Q Loss: 69.30079793930054, Actor Loss: -291.96030044555664
Episode 2001: Time: 0.06986594200134277, Total Reward: 63.30751886448556, Q Loss: 58.96914100646973, Actor Loss: -296.72815322875977
Episode 2002: Time: 0.07875919342041016, Total Reward: 72.5251756516146, Q Loss: 68.6574273109436, Actor Loss: -330.8224220275879
Episode 2003: Time: 0.06118607521057129, Total Reward: 54.104231041178004, Q Loss: 42.93531036376953, Actor Loss: -245.40104293823242
Episode 2004: Time: 0.08742237091064453, Total Reward: 81.97989589173075, Q Loss: 72.14610624313354, Actor Loss: -349.9820213317871
Episode 2005: Time: 0.061452388763427734, Total Reward: 54.029083171980226, Q Loss: 48.190035343170166, Actor Loss: -259.6347465515137
Episode 2006: Time: 0.0699007511138916, Total Reward: 63.27589064098847, Q Loss: 62.410149574279785, Actor Loss: -296.92244720458984
Episode 2007: Time: 0.13108086585998535, Total Reward: 128.15658698603693, Q Loss: 109.41550397872925, Actor Loss: -540.990629196167
Episode 2008: Time: 0.07824563980102539, Total Reward: 72.45382805474667, Q Loss: 59.72273254394531, Actor Loss: -330.83931732177734
Episode 2009: Time: 0.07832098007202148, Total Reward: 72.58826671156989, Q Loss: 80.59298992156982, Actor Loss: -332.7585792541504
Episode 2010: Time: 0.06148123741149902, Total Reward: 54.0966829832607, Q Loss: 66.32325553894043, Actor Loss: -251.6983299255371
Episode 2011: Time: 0.07841086387634277, Total Reward: 72.93145661071372, Q Loss: 70.83741855621338, Actor Loss: -326.5345458984375
Episode 2012: Time: 0.06955504417419434, Total Reward: 63.267635353844526, Q Loss: 59.35345125198364, Actor Loss: -291.71710205078125
Episode 2013: Time: 0.07054662704467773, Total Reward: 63.4026701691999, Q Loss: 59.60562086105347, Actor Loss: -297.23281478881836
Episode 2014: Time: 0.08684206008911133, Total Reward: 81.91839977779091, Q Loss: 69.90664505958557, Actor Loss: -378.98644256591797
Episode 2015: Time: 0.061042070388793945, Total Reward: 54.031102630064396, Q Loss: 47.9479455947876, Actor Loss: -239.6662654876709
Episode 2016: Time: 0.13077425956726074, Total Reward: 128.13573041373073, Q Loss: 95.18330717086792, Actor Loss: -551.3825626373291
Episode 2017: Time: 0.0784912109375, Total Reward: 72.37958617506426, Q Loss: 66.94751358032227, Actor Loss: -336.1332893371582
Episode 2018: Time: 0.08704233169555664, Total Reward: 81.87655524593211, Q Loss: 85.05914211273193, Actor Loss: -367.2226257324219
Episode 2019: Time: 0.06154179573059082, Total Reward: 53.895852970540325, Q Loss: 53.375505447387695, Actor Loss: -249.92163848876953
Episode 2020: Time: 0.15610551834106445, Total Reward: 154.43567452366725, Q Loss: 122.19798493385315, Actor Loss: -649.4255828857422
Episode 2021: Time: 0.07006287574768066, Total Reward: 63.07484580634923, Q Loss: 66.73318004608154, Actor Loss: -288.23353576660156
Episode 2022: Time: 0.11278867721557617, Total Reward: 108.63431875519937, Q Loss: 105.29292631149292, Actor Loss: -483.74828147888184
Episode 2023: Time: 0.0696110725402832, Total Reward: 63.38439496287003, Q Loss: 61.285812854766846, Actor Loss: -303.78700256347656

Episode 2024: Time: 0.07008099555969238, Total Reward: 63.43864212972146, Q Loss: 63.20563316345215, Actor Loss: -297.7981872558594
Episode 2025: Time: 0.06972575187683105, Total Reward: 63.3115566548172, Q Loss: 55.847402572631836, Actor Loss: -284.33624839782715
Episode 2026: Time: 0.08679485321044922, Total Reward: 81.7807235758942, Q Loss: 78.31374597549438, Actor Loss: -390.72107315063477
Episode 2027: Time: 0.08704948425292969, Total Reward: 82.14588471311667, Q Loss: 85.33065509796143, Actor Loss: -381.24370765686035
Episode 2028: Time: 0.07810115814208984, Total Reward: 72.38539210891757, Q Loss: 68.06328010559082, Actor Loss: -332.22930908203125
Episode 2029: Time: 0.06077075004577637, Total Reward: 54.166913409269476, Q Loss: 55.578232765197754, Actor Loss: -265.6633644104004
Episode 2030: Time: 0.2166903018951416, Total Reward: 219.14504900399288, Q Loss: 202.15034246444702, Actor Loss: -918.3695373535156
Episode 2031: Time: 0.06944584846496582, Total Reward: 63.5695073221626, Q Loss: 55.123855113983154, Actor Loss: -283.8878974914551
Episode 2032: Time: 0.07806944847106934, Total Reward: 72.76951303295097, Q Loss: 62.861695289611816, Actor Loss: -323.9780502319336
Episode 2033: Time: 0.08710575103759766, Total Reward: 81.63583723295736, Q Loss: 88.49361848831177, Actor Loss: -373.7983093261719
Episode 2034: Time: 0.07816910743713379, Total Reward: 72.90413309209893, Q Loss: 68.38166046142578, Actor Loss: -320.6312503814697
Episode 2035: Time: 0.10435891151428223, Total Reward: 100.81919135359611, Q Loss: 103.62640810012817, Actor Loss: -455.01721572875977
Episode 2036: Time: 0.06162285804748535, Total Reward: 54.24117815686439, Q Loss: 65.54166603088379, Actor Loss: -261.7762222290039
Episode 2037: Time: 0.07833695411682129, Total Reward: 72.28194279937928, Q Loss: 75.98297691345215, Actor Loss: -320.7794418334961
Episode 2038: Time: 0.06948328018188477, Total Reward: 63.458861765178945, Q Loss: 72.89500093460083, Actor Loss: -299.5021171569824
Episode 2039: Time: 0.2171647548675537, Total Reward: 220.9827077843338, Q Loss: 222.1657919883728, Actor Loss: -921.1924858093262
Episode 2040: Time: 0.11310863494873047, Total Reward: 109.82905243351493, Q Loss: 109.92080688476562, Actor Loss: -513.3951377868652
Episode 2041: Time: 0.05238223075866699, Total Reward: 44.256788376075285, Q Loss: 49.63151931762695, Actor Loss: -215.78676414489746
Episode 2042: Time: 0.07876801490783691, Total Reward: 72.30482255959636, Q Loss: 66.4415864944458, Actor Loss: -337.46933364868164
Episode 2043: Time: 0.20824718475341797, Total Reward: 211.24606412580886, Q Loss: 218.9881100654602, Actor Loss: -903.2874374389648
Episode 2044: Time: 0.08691239356994629, Total Reward: 81.80077069671171, Q Loss: 75.71714925765991, Actor Loss: -379.39024353027344
Episode 2045: Time: 0.061061859130859375, Total Reward: 54.24770014826366, Q Loss: 55.903565883636475, Actor Loss: -253.7070198059082
Episode 2046: Time: 0.12182950973510742, Total Reward: 118.53943258971685, Q Loss: 130.89950895309448, Actor Loss: -537.6859397888184
Episode 2047: Time: 0.09532403945922852, Total Reward: 90.68466900622451, Q Loss: 112.290292263031, Actor Loss: -424.01666259765625
Episode 2048: Time: 0.07819056510925293, Total Reward: 72.865599442739, Q Loss: 64.52782416343689, Actor Loss: -342.71753692626953
Episode 2049: Time: 0.12330913543701172, Total Reward: 118.76976982817989, Q Loss: 128.2245111465454, Actor Loss: -531.2333869934082
Episode 2050: Time: 0.06972360610961914, Total Reward: 63.64671463510049, Q Loss: 72.31056547164917, Actor Loss: -311.5489196777344
Episode 2051: Time: 0.19088220596313477, Total Reward: 191.7763029274171, Q Loss: 190.18999242782593, Actor Loss: -845.8733139038086

Episode 2052: Time: 0.06078362464904785, Total Reward: 53.679719611587224, Q Loss: 58.75927925109863, Actor Loss: -277.7472038269043
Episode 2053: Time: 0.0523226261138916, Total Reward: 44.62117105840375, Q Loss: 47.497976303100586, Actor Loss: -226.67562866210938
Episode 2054: Time: 0.06958293914794922, Total Reward: 62.759826773470664, Q Loss: 84.64102983474731, Actor Loss: -312.6990661621094
Episode 2055: Time: 0.07040023803710938, Total Reward: 63.27191204158125, Q Loss: 69.43418598175049, Actor Loss: -302.22673416137695
Episode 2056: Time: 0.08719635009765625, Total Reward: 81.99721512349514, Q Loss: 97.06415939331055, Actor Loss: -390.51028060913086
Episode 2057: Time: 0.060951948165893555, Total Reward: 53.402761325997034, Q Loss: 61.838234424591064, Actor Loss: -269.8343391418457
Episode 2058: Time: 0.061452388763427734, Total Reward: 54.16221126464957, Q Loss: 57.421303272247314, Actor Loss: -283.8693962097168
Episode 2059: Time: 0.060971736907958984, Total Reward: 54.1495493026583, Q Loss: 57.888225078582764, Actor Loss: -273.7507438659668
Episode 2060: Time: 0.11247777938842773, Total Reward: 109.83604066936897, Q Loss: 106.55838346481323, Actor Loss: -481.4942398071289
Episode 2061: Time: 0.0700995922088623, Total Reward: 63.38949206780366, Q Loss: 89.08850336074829, Actor Loss: -294.169620513916
Episode 2062: Time: 0.05217123031616211, Total Reward: 44.72437648606054, Q Loss: 60.56527042388916, Actor Loss: -231.97249603271484
Episode 2063: Time: 0.10392999649047852, Total Reward: 100.25783343629058, Q Loss: 102.37166023254395, Actor Loss: -467.07091522216797
Episode 2064: Time: 0.09570479393005371, Total Reward: 91.25738078757922, Q Loss: 94.35710382461548, Actor Loss: -406.5674419403076
Episode 2065: Time: 0.07781386375427246, Total Reward: 72.37161855747333, Q Loss: 81.08421564102173, Actor Loss: -342.1329650878906
Episode 2066: Time: 0.07813477516174316, Total Reward: 72.77122063036724, Q Loss: 79.88564920425415, Actor Loss: -348.11318588256836
Episode 2067: Time: 0.07005643844604492, Total Reward: 63.04148416399912, Q Loss: 68.30778884887695, Actor Loss: -305.9953956604004
Episode 2068: Time: 0.06072092056274414, Total Reward: 54.04734350539991, Q Loss: 61.08101558685303, Actor Loss: -269.4820442199707
Episode 2069: Time: 0.060828208923339844, Total Reward: 54.281071589365865, Q Loss: 61.45506238937378, Actor Loss: -274.85533905029297
Episode 2070: Time: 0.06946468353271484, Total Reward: 63.78698284212326, Q Loss: 64.94028329849243, Actor Loss: -304.82693099975586
Episode 2071: Time: 0.07880711555480957, Total Reward: 72.6188720416313, Q Loss: 95.06208086013794, Actor Loss: -355.5557556152344
Episode 2072: Time: 0.0610504150390625, Total Reward: 54.22288146414818, Q Loss: 77.43965291976929, Actor Loss: -269.4699897766113
Episode 2073: Time: 0.06955075263977051, Total Reward: 63.453744519445095, Q Loss: 71.0111494064331, Actor Loss: -314.27881622314453
Episode 2074: Time: 0.26840734481811523, Total Reward: 276.3613257664136, Q Loss: 255.70520567893982, Actor Loss: -1160.5024337768555
Episode 2075: Time: 0.10390949249267578, Total Reward: 100.47936093883109, Q Loss: 116.79064130783081, Actor Loss: -479.1102867126465
Episode 2076: Time: 0.09509682655334473, Total Reward: 90.81226966415566, Q Loss: 104.63418102264404, Actor Loss: -410.43808364868164
Episode 2077: Time: 0.09572696685791016, Total Reward: 91.08968879505092, Q Loss: 110.62210893630981, Actor Loss: -408.3974151611328
Episode 2078: Time: 0.1040949821472168, Total Reward: 100.21416331533548, Q Loss: 98.75663185119629, Actor Loss: -444.907377243042
Episode 2079: Time: 0.0873260498046875, Total Reward: 81.92171991260588, Q Loss: 88.76110649108887, Actor Loss: -366.7268466949463

Episode 2080: Time: 0.07047843933105469, Total Reward: 63.02697640748777, Q Loss: 83.0751428604126, Actor Loss: -309.40892791748047
Episode 2081: Time: 0.14745640754699707, Total Reward: 144.48227714537924, Q Loss: 165.86084842681885, Actor Loss: -670.4318428039551
Episode 2082: Time: 0.06123518943786621, Total Reward: 53.88744730686326, Q Loss: 60.645151138305664, Actor Loss: -261.7021141052246
Episode 2083: Time: 0.09544181823730469, Total Reward: 90.89967734808964, Q Loss: 104.08625316619873, Actor Loss: -429.6781120300293
Episode 2084: Time: 0.06929588317871094, Total Reward: 63.32606262208548, Q Loss: 76.36551189422607, Actor Loss: -321.3830375671387
Episode 2085: Time: 0.15596437454223633, Total Reward: 155.32266206452698, Q Loss: 170.48368406295776, Actor Loss: -715.3283538818359
Episode 2086: Time: 0.07773375511169434, Total Reward: 72.42954462396578, Q Loss: 81.51680755615234, Actor Loss: -361.7472343444824
Episode 2087: Time: 0.08638763427734375, Total Reward: 81.90627489177702, Q Loss: 100.82884883880615, Actor Loss: -383.0233573913574
Episode 2088: Time: 0.24243760108947754, Total Reward: 249.37982032068692, Q Loss: 286.3300247192383, Actor Loss: -1092.4342231750488
Episode 2089: Time: 0.060689687728881836, Total Reward: 53.88728061438484, Q Loss: 75.55935192108154, Actor Loss: -275.6410675048828
Episode 2090: Time: 0.06956219673156738, Total Reward: 62.98121033221473, Q Loss: 87.02643728256226, Actor Loss: -318.34507751464844
Episode 2091: Time: 0.23367023468017578, Total Reward: 239.27577824658366, Q Loss: 266.9233684539795, Actor Loss: -1045.8316898345947
Episode 2092: Time: 0.13911747932434082, Total Reward: 136.5459098046844, Q Loss: 174.86064624786377, Actor Loss: -639.1411399841309
Episode 2093: Time: 0.06986141204833984, Total Reward: 63.50219340083151, Q Loss: 83.24474620819092, Actor Loss: -312.14545822143555
Episode 2094: Time: 0.09532570838928223, Total Reward: 91.17893453030521, Q Loss: 134.14631271362305, Actor Loss: -458.5926704406738
Episode 2095: Time: 0.07799863815307617, Total Reward: 72.29275730332012, Q Loss: 85.5735182762146, Actor Loss: -332.2311019897461
Episode 2096: Time: 0.08696198463439941, Total Reward: 82.1120937972703, Q Loss: 109.41536378860474, Actor Loss: -401.98119354248047
Episode 2097: Time: 0.14717745780944824, Total Reward: 145.7735847332473, Q Loss: 167.35470628738403, Actor Loss: -656.4579696655273
Episode 2098: Time: 0.06145215034484863, Total Reward: 54.09614975382703, Q Loss: 75.23227310180664, Actor Loss: -268.1520538330078
Episode 2099: Time: 0.24277687072753906, Total Reward: 246.99559158306116, Q Loss: 286.63735580444336, Actor Loss: -1100.0223236083984
Validation Mean: 124.05859629791713, Validation Std: 48.55998799702498
saving model
Episode 2100: Time: 0.06119847297668457, Total Reward: 54.2100386506613, Q Loss: 69.45199346542358, Actor Loss: -273.49144554138184
Episode 2101: Time: 0.12148189544677734, Total Reward: 119.08780964499496, Q Loss: 137.3538851737976, Actor Loss: -531.9722423553467
Episode 2102: Time: 0.12196183204650879, Total Reward: 119.16130238857329, Q Loss: 136.38608837127686, Actor Loss: -554.5276641845703
Episode 2103: Time: 0.08698034286499023, Total Reward: 81.81712233985782, Q Loss: 90.42838668823242, Actor Loss: -393.19049072265625
Episode 2104: Time: 0.0957481861114502, Total Reward: 90.92148904803055, Q Loss: 115.23411083221436, Actor Loss: -435.46860122680664
Episode 2105: Time: 0.07908248901367188, Total Reward: 72.19304805950065, Q Loss: 100.07466316223145, Actor Loss: -351.25333404541016
Episode 2106: Time: 0.07866954803466797, Total Reward: 72.21835663034364, Q Loss: 104.70451498031616, Actor Loss: -359.9324951171875

Episode 2107: Time: 0.08845710754394531, Total Reward: 81.57209653683192, Q Loss: 113.85759401321411, Actor Loss: -411.8951301574707
Episode 2108: Time: 0.07977509498596191, Total Reward: 72.44590672278761, Q Loss: 98.24564933776855, Actor Loss: -355.23070907592773
Episode 2109: Time: 0.06973934173583984, Total Reward: 62.78738859863962, Q Loss: 86.41635990142822, Actor Loss: -319.4790153503418
Episode 2110: Time: 0.060997962951660156, Total Reward: 53.38256204184933, Q Loss: 74.62804698944092, Actor Loss: -289.1165580749512
Episode 2111: Time: 0.20939326286315918, Total Reward: 211.07573923635798, Q Loss: 282.9709405899048, Actor Loss: -965.6599502563477
Episode 2112: Time: 0.09562349319458008, Total Reward: 90.80777435314086, Q Loss: 115.53214740753174, Actor Loss: -433.2652893066406
Episode 2113: Time: 0.16533589363098145, Total Reward: 166.04135361512726, Q Loss: 189.06028699874878, Actor Loss: -753.930347442627
Episode 2114: Time: 0.06975936889648438, Total Reward: 63.02989694876662, Q Loss: 69.30087995529175, Actor Loss: -321.70176696777344
Episode 2115: Time: 0.07842016220092773, Total Reward: 72.38123223512524, Q Loss: 99.11591053009033, Actor Loss: -365.85069274902344
Episode 2116: Time: 0.1395280361175537, Total Reward: 136.4293726228784, Q Loss: 170.36047315597534, Actor Loss: -636.7935638427734
Episode 2117: Time: 0.1317458152770996, Total Reward: 128.2200288402416, Q Loss: 154.51704168319702, Actor Loss: -627.4040908813477
Episode 2118: Time: 0.10621953010559082, Total Reward: 100.77724955639488, Q Loss: 127.80490493774414, Actor Loss: -494.26014709472656
Episode 2119: Time: 0.13929510116577148, Total Reward: 136.71847116642954, Q Loss: 187.23374128341675, Actor Loss: -645.4018077850342
Episode 2120: Time: 0.0874643325805664, Total Reward: 81.52951409071528, Q Loss: 98.98859214782715, Actor Loss: -399.51229095458984
Episode 2121: Time: 0.1818101406097412, Total Reward: 182.90394672888922, Q Loss: 201.54668140411377, Actor Loss: -864.7835388183594
Episode 2122: Time: 0.13048553466796875, Total Reward: 127.14781262242435, Q Loss: 189.92387342453003, Actor Loss: -619.2880477905273
Episode 2123: Time: 0.09524989128112793, Total Reward: 91.70694751301727, Q Loss: 134.54280042648315, Actor Loss: -466.0711212158203
Episode 2124: Time: 0.09531116485595703, Total Reward: 90.51310303762621, Q Loss: 117.62607765197754, Actor Loss: -438.95004653930664
Episode 2125: Time: 0.16426301002502441, Total Reward: 165.41608275030256, Q Loss: 209.7751703262329, Actor Loss: -771.8635711669922
Episode 2126: Time: 0.06925535202026367, Total Reward: 63.51487800234323, Q Loss: 131.17591524124146, Actor Loss: -333.54174423217773
Episode 2127: Time: 0.17299103736877441, Total Reward: 174.04038130584703, Q Loss: 237.66966485977173, Actor Loss: -814.1542091369629
Episode 2128: Time: 0.06924176216125488, Total Reward: 63.11703871067662, Q Loss: 94.11790800094604, Actor Loss: -331.23774337768555
Episode 2129: Time: 0.15582275390625, Total Reward: 154.9168948779564, Q Loss: 207.36532497406006, Actor Loss: -731.0241775512695
Episode 2130: Time: 0.10693645477294922, Total Reward: 100.49324621403456, Q Loss: 163.84289741516113, Actor Loss: -529.7321929931641
Episode 2131: Time: 0.0694119930267334, Total Reward: 62.68698917393183, Q Loss: 108.84266424179077, Actor Loss: -338.0082244873047
Episode 2132: Time: 0.15588068962097168, Total Reward: 155.70298639612764, Q Loss: 194.08309745788574, Actor Loss: -731.1110763549805
Episode 2133: Time: 0.07807707786560059, Total Reward: 72.83284852300864, Q Loss: 106.82684469223022, Actor Loss: -370.38317108154297
Episode 2134: Time: 0.09512138366699219, Total Reward: 90.95637189403271, Q Loss: 106.24410629272461, Actor Loss: -426.4879341125488

Episode 2135: Time: 0.17334628105163574, Total Reward: 174.74504041128162, Q Loss: 232.46547889709473, Actor Loss: -860.2145004272461
Episode 2136: Time: 0.1468660831451416, Total Reward: 146.2914885628326, Q Loss: 189.9979066848755, Actor Loss: -683.0774154663086
Episode 2137: Time: 0.07856225967407227, Total Reward: 72.3703050346926, Q Loss: 121.69260358810425, Actor Loss: -392.59975814819336
Episode 2138: Time: 0.08652234077453613, Total Reward: 81.78443287443137, Q Loss: 106.33615493774414, Actor Loss: -425.43375396728516
Episode 2139: Time: 0.17299699783325195, Total Reward: 174.91808564659243, Q Loss: 274.3028964996338, Actor Loss: -829.0978164672852
Episode 2140: Time: 0.20728135108947754, Total Reward: 211.0577171160979, Q Loss: 254.35343599319458, Actor Loss: -1007.0285339355469
Episode 2141: Time: 0.11221098899841309, Total Reward: 109.21040066599461, Q Loss: 155.9061794281006, Actor Loss: -544.1331748962402
Episode 2142: Time: 0.06051754951477051, Total Reward: 53.87386179056207, Q Loss: 86.6831111907959, Actor Loss: -305.43690490722656
Episode 2143: Time: 0.08671975135803223, Total Reward: 82.06504001083624, Q Loss: 103.97319078445435, Actor Loss: -411.3587837219238
Episode 2144: Time: 0.06049180030822754, Total Reward: 53.50312046544632, Q Loss: 75.88637971878052, Actor Loss: -282.5852355957031
Episode 2145: Time: 0.11214351654052734, Total Reward: 109.78247038769942, Q Loss: 151.4684853553772, Actor Loss: -543.1743087768555
Episode 2146: Time: 0.1554710865020752, Total Reward: 154.76016300253139, Q Loss: 197.70145845413208, Actor Loss: -760.666675567627
Episode 2147: Time: 0.09517550468444824, Total Reward: 90.95416293142114, Q Loss: 117.29135465621948, Actor Loss: -457.56717681884766
Episode 2148: Time: 0.06091594696044922, Total Reward: 53.627678038344435, Q Loss: 92.25310516357422, Actor Loss: -301.9031753540039
Episode 2149: Time: 0.17353153228759766, Total Reward: 173.94795794807123, Q Loss: 224.69308376312256, Actor Loss: -798.2438278198242
Episode 2150: Time: 0.06924891471862793, Total Reward: 62.79365333920575, Q Loss: 84.11278486251831, Actor Loss: -327.8401069641113
Episode 2151: Time: 0.09506034851074219, Total Reward: 90.60502084881291, Q Loss: 150.9810438156128, Actor Loss: -460.6236267089844
Episode 2152: Time: 0.13004446029663086, Total Reward: 127.34277311791963, Q Loss: 178.39590167999268, Actor Loss: -628.7528266906738
Episode 2153: Time: 0.14647388458251953, Total Reward: 146.74332698807183, Q Loss: 211.15490746498108, Actor Loss: -716.8956413269043
Episode 2154: Time: 0.07806587219238281, Total Reward: 72.80122658541278, Q Loss: 117.93509483337402, Actor Loss: -364.5195732116699
Episode 2155: Time: 0.15514731407165527, Total Reward: 155.10733056979618, Q Loss: 235.93033170700073, Actor Loss: -776.4099388122559
Episode 2156: Time: 0.06073713302612305, Total Reward: 54.300881325902466, Q Loss: 81.50759792327881, Actor Loss: -294.5674171447754
Episode 2157: Time: 0.08669590950012207, Total Reward: 81.86370252496225, Q Loss: 141.84807109832764, Actor Loss: -431.36527252197266
Episode 2158: Time: 0.07767653465270996, Total Reward: 72.34375560161385, Q Loss: 110.06630039215088, Actor Loss: -386.8407783508301
Episode 2159: Time: 0.14683818817138672, Total Reward: 146.6051543571976, Q Loss: 206.72840118408203, Actor Loss: -732.271598815918
Episode 2160: Time: 0.07770609855651855, Total Reward: 72.52256451102481, Q Loss: 99.59683179855347, Actor Loss: -373.5402412414551
Episode 2161: Time: 0.21563339233398438, Total Reward: 219.493969110261, Q Loss: 305.50982332229614, Actor Loss: -1053.946762084961
Episode 2162: Time: 0.11215567588806152, Total Reward: 109.1825441115312, Q Loss: 144.28448724746704, Actor Loss: -542.5258026123047

Episode 2163: Time: 0.15553498268127441, Total Reward: 155.48754342919995, Q Loss: 300.38015031814575, Actor Loss: -772.721004486084
Episode 2164: Time: 0.14644813537597656, Total Reward: 145.81159932820222, Q Loss: 221.9300127029419, Actor Loss: -729.7716636657715
Episode 2165: Time: 0.1470355987548828, Total Reward: 146.95604263683583, Q Loss: 273.21018409729004, Actor Loss: -723.2056274414062
Episode 2166: Time: 0.25017881393432617, Total Reward: 257.1222328773656, Q Loss: 399.1916284561157, Actor Loss: -1222.223217010498
Episode 2167: Time: 0.15586233139038086, Total Reward: 155.74650804459924, Q Loss: 241.1876106262207, Actor Loss: -773.6388664245605
Episode 2168: Time: 0.14687442779541016, Total Reward: 146.7317635887723, Q Loss: 202.86981964111328, Actor Loss: -728.0501136779785
Episode 2169: Time: 0.1292572021484375, Total Reward: 128.1095877368119, Q Loss: 276.95224714279175, Actor Loss: -657.6781959533691
Episode 2170: Time: 0.10401034355163574, Total Reward: 100.40568363096416, Q Loss: 152.2844696044922, Actor Loss: -503.81744384765625
Episode 2171: Time: 0.060164451599121094, Total Reward: 53.87624024115991, Q Loss: 113.87815380096436, Actor Loss: -322.5733070373535
Episode 2172: Time: 0.14667940139770508, Total Reward: 146.70151822185736, Q Loss: 412.7271795272827, Actor Loss: -752.2065620422363
Episode 2173: Time: 0.1634833812713623, Total Reward: 165.51643153346902, Q Loss: 312.8376512527466, Actor Loss: -847.0132751464844
Episode 2174: Time: 0.12995386123657227, Total Reward: 126.52335099361937, Q Loss: 222.6129903793335, Actor Loss: -678.8844604492188
Episode 2175: Time: 0.07758975028991699, Total Reward: 72.72616686549291, Q Loss: 137.3012251853943, Actor Loss: -398.65586853027344
Episode 2176: Time: 0.1203148365020752, Total Reward: 118.962706210245, Q Loss: 163.478413105011, Actor Loss: -618.6153106689453
Episode 2177: Time: 0.10379385948181152, Total Reward: 100.26472673167078, Q Loss: 291.0172348022461, Actor Loss: -521.8679466247559
Episode 2178: Time: 0.1550133228302002, Total Reward: 155.67623438091027, Q Loss: 235.70848178863525, Actor Loss: -807.4697875976562
Episode 2179: Time: 0.09518718719482422, Total Reward: 90.36869656255367, Q Loss: 145.13377332687378, Actor Loss: -472.7683296203613
Episode 2180: Time: 0.11203360557556152, Total Reward: 109.83429334254663, Q Loss: 190.93396091461182, Actor Loss: -580.540599822998
Episode 2181: Time: 0.051926612854003906, Total Reward: 44.575099896931704, Q Loss: 79.98337841033936, Actor Loss: -253.72662734985352
Episode 2182: Time: 0.06095075607299805, Total Reward: 53.79721473795054, Q Loss: 92.18821907043457, Actor Loss: -320.1578788757324
Episode 2183: Time: 0.12062883377075195, Total Reward: 118.75759004355646, Q Loss: 197.06562328338623, Actor Loss: -627.764835357666
Episode 2184: Time: 0.07782125473022461, Total Reward: 72.66269592673912, Q Loss: 132.39558029174805, Actor Loss: -394.0972137451172
Episode 2185: Time: 0.10376143455505371, Total Reward: 99.01578202958156, Q Loss: 196.59438037872314, Actor Loss: -522.7261924743652
Episode 2186: Time: 0.0948340892791748, Total Reward: 91.08939276257078, Q Loss: 159.61781883239746, Actor Loss: -479.5747261047363
Episode 2187: Time: 0.09470820426940918, Total Reward: 91.19658888705858, Q Loss: 153.33175468444824, Actor Loss: -494.0754508972168
Episode 2188: Time: 0.24140596389770508, Total Reward: 246.85104499175154, Q Loss: 531.5711026191711, Actor Loss: -1253.9598579406738
Episode 2189: Time: 0.08629775047302246, Total Reward: 81.23091105750541, Q Loss: 195.24671745300293, Actor Loss: -424.96443939208984
Episode 2190: Time: 0.0950930118560791, Total Reward: 88.45019152482797, Q Loss: 148.89879703521729, Actor Loss: -467.8296432495117

Episode 2191: Time: 0.08688616752624512, Total Reward: 81.17723312318265, Q Loss: 154.4778871536255, Actor Loss: -423.6693534851074
Episode 2192: Time: 0.19003701210021973, Total Reward: 192.68561906771905, Q Loss: 368.3648157119751, Actor Loss: -1006.1904144287109
Episode 2193: Time: 0.09564399719238281, Total Reward: 91.149870268476, Q Loss: 130.70201873779297, Actor Loss: -470.3512191772461
Episode 2194: Time: 0.13824987411499023, Total Reward: 136.48339479078143, Q Loss: 197.9672622680664, Actor Loss: -723.6388969421387
Episode 2195: Time: 0.13891029357910156, Total Reward: 136.9701577049052, Q Loss: 260.83130741119385, Actor Loss: -718.5601119995117
Episode 2196: Time: 0.06909036636352539, Total Reward: 63.09659371862488, Q Loss: 106.2443962097168, Actor Loss: -362.2882957458496
Episode 2197: Time: 0.06913423538208008, Total Reward: 62.79636037580198, Q Loss: 105.7728214263916, Actor Loss: -356.3344306945801
Episode 2198: Time: 0.1554884910583496, Total Reward: 155.12011636789506, Q Loss: 315.4100179672241, Actor Loss: -815.3317756652832
Episode 2199: Time: 0.06942939758300781, Total Reward: 62.782352610167, Q Loss: 152.43581581115723, Actor Loss: -377.53720474243164
Validation Mean: 133.0635131860946, Validation Std: 45.11923965315324
saving model
Episode 2200: Time: 0.11304616928100586, Total Reward: 109.44097465637722, Q Loss: 195.2016019821167, Actor Loss: -593.0322189331055
Episode 2201: Time: 0.1473386287689209, Total Reward: 146.03283026958982, Q Loss: 268.50644874572754, Actor Loss: -769.4597625732422
Episode 2202: Time: 0.06939911842346191, Total Reward: 63.01148401551306, Q Loss: 106.70485019683838, Actor Loss: -348.4932670593262
Episode 2203: Time: 0.06934690475463867, Total Reward: 62.51689875433932, Q Loss: 97.75615310668945, Actor Loss: -357.6565132141113
Episode 2204: Time: 0.09538888931274414, Total Reward: 90.5158343040403, Q Loss: 161.3493824005127, Actor Loss: -508.1901206970215
Episode 2205: Time: 0.1808786392211914, Total Reward: 183.3566118994615, Q Loss: 313.8345069885254, Actor Loss: -959.1813583374023
Episode 2206: Time: 0.1724255084991455, Total Reward: 173.8888367588945, Q Loss: 336.0023670196533, Actor Loss: -882.431339263916
Episode 2207: Time: 0.0519719123840332, Total Reward: 44.45530282802993, Q Loss: 107.54237842559814, Actor Loss: -260.4925003051758
Episode 2208: Time: 0.11196088790893555, Total Reward: 109.29704922285019, Q Loss: 184.5154733657837, Actor Loss: -591.3642387390137
Episode 2209: Time: 0.12103438377380371, Total Reward: 118.77838739196682, Q Loss: 175.25236701965332, Actor Loss: -632.8883934020996
Episode 2210: Time: 0.08642983436584473, Total Reward: 82.06072211806055, Q Loss: 148.72932147979736, Actor Loss: -445.1486167907715
Episode 2211: Time: 0.138777494430542, Total Reward: 137.29019649300028, Q Loss: 224.38843822479248, Actor Loss: -741.9123306274414
Episode 2212: Time: 0.1206979751586914, Total Reward: 118.78154411867052, Q Loss: 208.0473198890686, Actor Loss: -629.0994338989258
Episode 2213: Time: 0.12500905990600586, Total Reward: 118.77824619348675, Q Loss: 258.8050708770752, Actor Loss: -639.135498046875
Episode 2214: Time: 0.10430574417114258, Total Reward: 100.00023143125675, Q Loss: 190.81594944000244, Actor Loss: -564.6669120788574
Episode 2215: Time: 0.07786941528320312, Total Reward: 72.72320875684296, Q Loss: 147.0785551071167, Actor Loss: -424.0470275878906
Episode 2216: Time: 0.08687901496887207, Total Reward: 82.02532012262401, Q Loss: 160.73785305023193, Actor Loss: -454.82516860961914
Episode 2217: Time: 0.0783071517944336, Total Reward: 72.61465840251618, Q Loss: 115.29073095321655, Actor Loss: -412.5887107849121

Episode 2218: Time: 0.06927728652954102, Total Reward: 62.731677248152636, Q Loss: 106.80536794662476, Actor Loss: -369.0379943847656
Episode 2219: Time: 0.1561734676361084, Total Reward: 155.23690209771775, Q Loss: 261.36425971984863, Actor Loss: -797.9440040588379
Episode 2220: Time: 0.190108060836792, Total Reward: 192.0141264429327, Q Loss: 330.67320823669434, Actor Loss: -1013.3924140930176
Episode 2221: Time: 0.1230630874633789, Total Reward: 118.72805700665172, Q Loss: 205.90211963653564, Actor Loss: -630.9153480529785
Episode 2222: Time: 0.14693689346313477, Total Reward: 144.99236737955798, Q Loss: 256.31923484802246, Actor Loss: -794.1643486022949
Episode 2223: Time: 0.06976747512817383, Total Reward: 63.092047665130295, Q Loss: 141.8946237564087, Actor Loss: -385.2460746765137
Episode 2224: Time: 0.15619802474975586, Total Reward: 155.4250886592332, Q Loss: 308.77128887176514, Actor Loss: -857.881160736084
Episode 2225: Time: 0.0784454345703125, Total Reward: 71.57901465312162, Q Loss: 144.43556213378906, Actor Loss: -416.96771240234375
Episode 2226: Time: 0.08655977249145508, Total Reward: 81.10846831722631, Q Loss: 173.0264654159546, Actor Loss: -473.5926322937012
Episode 2227: Time: 0.1388845443725586, Total Reward: 137.34340454233063, Q Loss: 368.4250249862671, Actor Loss: -734.703742980957
Episode 2228: Time: 0.10386180877685547, Total Reward: 99.2254774622087, Q Loss: 167.12298107147217, Actor Loss: -548.9400253295898
Episode 2229: Time: 0.1211996078491211, Total Reward: 118.89831715967654, Q Loss: 200.94365406036377, Actor Loss: -638.293155670166
Episode 2230: Time: 0.08637380599975586, Total Reward: 81.4861546828391, Q Loss: 174.10488510131836, Actor Loss: -474.9055633544922
Episode 2231: Time: 0.22573590278625488, Total Reward: 230.4856158057454, Q Loss: 442.5497269630432, Actor Loss: -1214.6993026733398
Episode 2232: Time: 0.10370206832885742, Total Reward: 100.51604296011487, Q Loss: 243.9539566040039, Actor Loss: -564.1801414489746
Episode 2233: Time: 0.06051492691040039, Total Reward: 53.63000273872656, Q Loss: 131.4811305999756, Actor Loss: -340.5945472717285
Episode 2234: Time: 0.1298506259918213, Total Reward: 127.4874369674525, Q Loss: 236.02698612213135, Actor Loss: -696.6485862731934
Episode 2235: Time: 0.11220002174377441, Total Reward: 108.53242562203506, Q Loss: 203.07065391540527, Actor Loss: -623.5564346313477
Episode 2236: Time: 0.1643209457397461, Total Reward: 164.49492578029705, Q Loss: 312.3947730064392, Actor Loss: -840.0074920654297
Episode 2237: Time: 0.06917810440063477, Total Reward: 62.377424283900545, Q Loss: 144.35348320007324, Actor Loss: -373.5050506591797
Episode 2238: Time: 0.07790327072143555, Total Reward: 72.27090874417745, Q Loss: 157.46689987182617, Actor Loss: -423.7522735595703
Episode 2239: Time: 0.1728672981262207, Total Reward: 174.70892079445528, Q Loss: 349.40303325653076, Actor Loss: -958.0000534057617
Episode 2240: Time: 0.12946391105651855, Total Reward: 127.86394661855381, Q Loss: 245.39461421966553, Actor Loss: -704.6695442199707
Episode 2241: Time: 0.11264610290527344, Total Reward: 109.33554721335427, Q Loss: 269.78222465515137, Actor Loss: -642.490779876709
Episode 2242: Time: 0.09501791000366211, Total Reward: 90.92390587002309, Q Loss: 196.23285293579102, Actor Loss: -522.9681854248047
Episode 2243: Time: 0.06905150413513184, Total Reward: 62.48276703794974, Q Loss: 115.44312381744385, Actor Loss: -378.1757354736328
Episode 2244: Time: 0.147263765335083, Total Reward: 146.41123297385985, Q Loss: 254.4296498298645, Actor Loss: -798.2511329650879
Episode 2245: Time: 0.12937068939208984, Total Reward: 127.58528869364538, Q Loss: 317.05174255371094, Actor Loss: -723.4128265380859

Episode 2246: Time: 0.3140380382537842, Total Reward: 322.25365963740967, Q Loss: 637.8208141326904, Actor Loss: -1716.2847518920898
Episode 2247: Time: 0.11303567886352539, Total Reward: 109.90818244726589, Q Loss: 236.13943719863892, Actor Loss: -617.6464424133301
Episode 2248: Time: 0.08677148818969727, Total Reward: 81.51487518370371, Q Loss: 196.8856897354126, Actor Loss: -463.5988006591797
Episode 2249: Time: 0.11297249794006348, Total Reward: 109.46575170118034, Q Loss: 254.86939430236816, Actor Loss: -609.245906829834
Episode 2250: Time: 0.06087040901184082, Total Reward: 52.97843631575356, Q Loss: 136.4948034286499, Actor Loss: -349.2927551269531
Episode 2251: Time: 0.07814908027648926, Total Reward: 72.73208353627929, Q Loss: 192.138747215271, Actor Loss: -397.8249168395996
Episode 2252: Time: 0.06055879592895508, Total Reward: 54.117038417308784, Q Loss: 109.99494171142578, Actor Loss: -335.4942817687988
Episode 2253: Time: 0.07866692543029785, Total Reward: 72.79123717630675, Q Loss: 151.75204944610596, Actor Loss: -440.5161819458008
Episode 2254: Time: 0.12153220176696777, Total Reward: 118.67847118829566, Q Loss: 218.03880500793457, Actor Loss: -662.7321014404297
Episode 2255: Time: 0.11311960220336914, Total Reward: 108.7418408084243, Q Loss: 209.3053731918335, Actor Loss: -622.2758903503418
Episode 2256: Time: 0.1123502254486084, Total Reward: 109.44215521246903, Q Loss: 244.1747341156006, Actor Loss: -626.2953414916992
Episode 2257: Time: 0.07810568809509277, Total Reward: 71.73468738918902, Q Loss: 141.86816310882568, Actor Loss: -418.55553436279297
Episode 2258: Time: 0.06960034370422363, Total Reward: 62.940825689210044, Q Loss: 156.14430141448975, Actor Loss: -385.2630157470703
Episode 2259: Time: 0.25099825859069824, Total Reward: 257.0983168006673, Q Loss: 506.1891632080078, Actor Loss: -1395.0213775634766
Episode 2260: Time: 0.10378479957580566, Total Reward: 98.90887188269166, Q Loss: 241.2529239654541, Actor Loss: -551.5099639892578
Episode 2261: Time: 0.15588927268981934, Total Reward: 156.1157751055111, Q Loss: 348.2032136917114, Actor Loss: -872.6675033569336
Episode 2262: Time: 0.13823485374450684, Total Reward: 137.88860707319947, Q Loss: 273.6834225654602, Actor Loss: -756.9660110473633
Episode 2263: Time: 0.14722990989685059, Total Reward: 146.60037158989064, Q Loss: 268.37069511413574, Actor Loss: -809.3353881835938
Episode 2264: Time: 0.13795065879821777, Total Reward: 136.95409415188774, Q Loss: 324.9388599395752, Actor Loss: -781.3557357788086
Episode 2265: Time: 0.23365473747253418, Total Reward: 240.20307895694333, Q Loss: 502.9463529586792, Actor Loss: -1300.396224975586
Episode 2266: Time: 0.07798647880554199, Total Reward: 72.51338979830479, Q Loss: 165.55646228790283, Actor Loss: -412.804012298584
Episode 2267: Time: 0.13862967491149902, Total Reward: 136.77566420888613, Q Loss: 282.87458324432373, Actor Loss: -784.8967895507812
Episode 2268: Time: 0.1558229923248291, Total Reward: 156.16171898718946, Q Loss: 336.2708716392517, Actor Loss: -889.0423774719238
Episode 2269: Time: 0.1643047332763672, Total Reward: 164.0142236731075, Q Loss: 408.2237014770508, Actor Loss: -951.4338264465332
Episode 2270: Time: 0.1295614242553711, Total Reward: 127.5870689889041, Q Loss: 319.124680519104, Actor Loss: -753.4114837646484
Episode 2271: Time: 0.06929993629455566, Total Reward: 63.18074064393491, Q Loss: 190.35775184631348, Actor Loss: -397.22076416015625
Episode 2272: Time: 0.07896971702575684, Total Reward: 72.27522933522091, Q Loss: 244.2354736328125, Actor Loss: -413.77403259277344
Episode 2273: Time: 0.0864877700805664, Total Reward: 81.69961742987596, Q Loss: 218.45320987701416, Actor Loss: -492.5809669494629

Episode 2274: Time: 0.06937408447265625, Total Reward: 62.58009205374413, Q Loss: 182.87226104736328, Actor Loss: -386.6584892272949
Episode 2275: Time: 0.09549546241760254, Total Reward: 91.34283300635973, Q Loss: 230.90786266326904, Actor Loss: -513.5581207275391
Episode 2276: Time: 0.1038062572479248, Total Reward: 99.83514371927306, Q Loss: 268.97638034820557, Actor Loss: -590.458366394043
Episode 2277: Time: 0.2418839931488037, Total Reward: 249.2077309707526, Q Loss: 513.8707647323608, Actor Loss: -1365.9514083862305
Episode 2278: Time: 0.10348725318908691, Total Reward: 100.32916390667553, Q Loss: 217.1200065612793, Actor Loss: -545.0326766967773
Episode 2279: Time: 0.09502792358398438, Total Reward: 91.09406863115903, Q Loss: 196.07206344604492, Actor Loss: -547.5917358398438
Episode 2280: Time: 0.12947559356689453, Total Reward: 127.79875346519242, Q Loss: 303.5633707046509, Actor Loss: -721.5346374511719
Episode 2281: Time: 0.06915736198425293, Total Reward: 63.39404294732955, Q Loss: 146.23916625976562, Actor Loss: -394.96318435668945
Episode 2282: Time: 0.06942033767700195, Total Reward: 62.80047757337316, Q Loss: 179.14793491363525, Actor Loss: -394.09812927246094
Episode 2283: Time: 0.06044960021972656, Total Reward: 54.1260470295874, Q Loss: 140.82906913757324, Actor Loss: -355.53946685791016
Episode 2284: Time: 0.14681696891784668, Total Reward: 145.17755441059273, Q Loss: 388.91968727111816, Actor Loss: -836.9236831665039
Episode 2285: Time: 0.16404414176940918, Total Reward: 165.03477571733512, Q Loss: 434.51184272766113, Actor Loss: -950.6964492797852
Episode 2286: Time: 0.19892191886901855, Total Reward: 202.3659181196778, Q Loss: 520.2191591262817, Actor Loss: -1137.8690643310547
Episode 2287: Time: 0.09530043601989746, Total Reward: 91.22590050455447, Q Loss: 246.9638328552246, Actor Loss: -538.0859222412109
Episode 2288: Time: 0.0694434642791748, Total Reward: 63.186206603764965, Q Loss: 183.7758274078369, Actor Loss: -398.83960723876953
Episode 2289: Time: 0.09584426879882812, Total Reward: 90.7038066259078, Q Loss: 240.53885746002197, Actor Loss: -533.0603790283203
Episode 2290: Time: 0.19027233123779297, Total Reward: 192.61534281580006, Q Loss: 436.4159107208252, Actor Loss: -1093.6638145446777
Episode 2291: Time: 0.0871133804321289, Total Reward: 81.48308478347171, Q Loss: 197.76910209655762, Actor Loss: -510.1056098937988
Episode 2292: Time: 0.27676868438720703, Total Reward: 285.74856565075, Q Loss: 633.2925386428833, Actor Loss: -1593.673683166504
Episode 2293: Time: 0.14748263359069824, Total Reward: 146.3774390626755, Q Loss: 383.234148979187, Actor Loss: -838.4232635498047
Episode 2294: Time: 0.1218559741973877, Total Reward: 118.44138659000137, Q Loss: 309.7013740539551, Actor Loss: -712.0408744812012
Episode 2295: Time: 0.11760807037353516, Total Reward: 91.27120759030582, Q Loss: 216.2663450241089, Actor Loss: -547.8815116882324
Episode 2296: Time: 0.10427355766296387, Total Reward: 99.57867786801124, Q Loss: 257.3266067504883, Actor Loss: -610.8794021606445
Episode 2297: Time: 0.1992650032043457, Total Reward: 201.63348848934447, Q Loss: 506.8650140762329, Actor Loss: -1136.661289215088
Episode 2298: Time: 0.06155204772949219, Total Reward: 53.57731864119105, Q Loss: 150.15149593353271, Actor Loss: -364.5556869506836
Episode 2299: Time: 0.10432028770446777, Total Reward: 100.73622678260254, Q Loss: 251.0892848968506, Actor Loss: -603.4618644714355
Validation Mean: 149.56952042933233, Validation Std: 64.11866314442055
saving model
Episode 2300: Time: 0.0612940788269043, Total Reward: 53.56760159391483, Q Loss: 129.88849449157715, Actor Loss: -338.24306869506836

Episode 2301: Time: 0.08672022819519043, Total Reward: 81.78796176158541, Q Loss: 205.30766201019287, Actor Loss: -510.78935623168945
Episode 2302: Time: 0.06979608535766602, Total Reward: 62.647059214494924, Q Loss: 155.55432891845703, Actor Loss: -412.2300834655762
Episode 2303: Time: 0.10449075698852539, Total Reward: 100.31426251155457, Q Loss: 235.87189102172852, Actor Loss: -601.1530418395996
Episode 2304: Time: 0.07789397239685059, Total Reward: 71.40061869590724, Q Loss: 215.35513496398926, Actor Loss: -453.5892105102539
Episode 2305: Time: 0.06995010375976562, Total Reward: 63.23290558786026, Q Loss: 187.96378993988037, Actor Loss: -399.534725189209
Episode 2306: Time: 0.1382744312286377, Total Reward: 137.28114353799634, Q Loss: 334.44189071655273, Actor Loss: -808.1529235839844
Episode 2307: Time: 0.09583711624145508, Total Reward: 90.4259163191338, Q Loss: 257.9039478302002, Actor Loss: -558.1255798339844
Episode 2308: Time: 0.06978988647460938, Total Reward: 62.25878744087902, Q Loss: 197.95454502105713, Actor Loss: -395.5585403442383
Episode 2309: Time: 0.10350346565246582, Total Reward: 100.22488598328094, Q Loss: 232.31369304656982, Actor Loss: -624.6778793334961
Episode 2310: Time: 0.09566593170166016, Total Reward: 90.59959042151299, Q Loss: 243.98724937438965, Actor Loss: -578.0068511962891
Episode 2311: Time: 0.13843846321105957, Total Reward: 137.3931788887418, Q Loss: 369.79425525665283, Actor Loss: -844.6213073730469
Episode 2312: Time: 0.08749556541442871, Total Reward: 82.1501537457953, Q Loss: 252.13711738586426, Actor Loss: -495.3116989135742
Episode 2313: Time: 0.11298608779907227, Total Reward: 109.11234576150443, Q Loss: 273.4844217300415, Actor Loss: -650.0433464050293
Episode 2314: Time: 0.11304068565368652, Total Reward: 109.59467583560719, Q Loss: 257.99564933776855, Actor Loss: -644.8514060974121
Episode 2315: Time: 0.12976694107055664, Total Reward: 127.5157774103089, Q Loss: 321.8661193847656, Actor Loss: -751.722526550293
Episode 2316: Time: 0.0694737434387207, Total Reward: 63.39224791355682, Q Loss: 178.91036701202393, Actor Loss: -427.6907958984375
Episode 2317: Time: 0.13933205604553223, Total Reward: 137.5144860012621, Q Loss: 354.9255418777466, Actor Loss: -815.6567115783691
Episode 2318: Time: 0.23400640487670898, Total Reward: 238.584851421761, Q Loss: 626.7211446762085, Actor Loss: -1360.7984313964844
Episode 2319: Time: 0.11246466636657715, Total Reward: 109.76780783837812, Q Loss: 328.35328578948975, Actor Loss: -669.8366737365723
Episode 2320: Time: 0.060904502868652344, Total Reward: 53.303581291752636, Q Loss: 150.94361019134521, Actor Loss: -387.8174591064453
Episode 2321: Time: 0.13901877403259277, Total Reward: 137.56112161481346, Q Loss: 412.2965564727783, Actor Loss: -827.7737846374512
Episode 2322: Time: 0.06104683876037598, Total Reward: 53.8490938675709, Q Loss: 157.9428939819336, Actor Loss: -364.19662857055664
Episode 2323: Time: 0.10367178916931152, Total Reward: 100.44098493404492, Q Loss: 294.4671630859375, Actor Loss: -621.5292701721191
Episode 2324: Time: 0.09541654586791992, Total Reward: 91.2740230809225, Q Loss: 287.79113578796387, Actor Loss: -563.008716583252
Episode 2325: Time: 0.10407257080078125, Total Reward: 100.64806158723216, Q Loss: 307.4684371948242, Actor Loss: -630.4105262756348
Episode 2326: Time: 0.14738059043884277, Total Reward: 146.73100836025304, Q Loss: 412.94756031036377, Actor Loss: -885.9603309631348
Episode 2327: Time: 0.0951073169708252, Total Reward: 91.1138366796663, Q Loss: 253.32727813720703, Actor Loss: -565.2812614440918
Episode 2328: Time: 0.1317276954650879, Total Reward: 127.97403751925359, Q Loss: 330.72910499572754, Actor Loss: -788.1896896362305

Episode 2329: Time: 0.10361576080322266, Total Reward: 100.1799261352976, Q Loss: 267.86101055145264, Actor Loss: -624.8285522460938
Episode 2330: Time: 0.1991407871246338, Total Reward: 203.10316907201943, Q Loss: 484.74355125427246, Actor Loss: -1204.9970245361328
Episode 2331: Time: 0.1123206615447998, Total Reward: 108.72110980563929, Q Loss: 308.6229305267334, Actor Loss: -656.5118980407715
Episode 2332: Time: 0.11257624626159668, Total Reward: 108.79161640693724, Q Loss: 324.7630958557129, Actor Loss: -713.7913093566895
Episode 2333: Time: 0.1555182933807373, Total Reward: 156.24089702996685, Q Loss: 523.6863307952881, Actor Loss: -956.9190330505371
Episode 2334: Time: 0.11285257339477539, Total Reward: 109.54517237317822, Q Loss: 304.3856191635132, Actor Loss: -679.6341171264648
Episode 2335: Time: 0.16382932662963867, Total Reward: 165.1668869473543, Q Loss: 459.46436309814453, Actor Loss: -1005.8554611206055
Episode 2336: Time: 0.17352890968322754, Total Reward: 174.2259030618741, Q Loss: 459.4474973678589, Actor Loss: -1058.3074264526367
Episode 2337: Time: 0.15563488006591797, Total Reward: 155.9421421262982, Q Loss: 464.73967456817627, Actor Loss: -927.1143035888672
Episode 2338: Time: 0.10378456115722656, Total Reward: 99.9794515804539, Q Loss: 287.9991979598999, Actor Loss: -627.8052444458008
Episode 2339: Time: 0.06919598579406738, Total Reward: 63.3023499424512, Q Loss: 185.09396839141846, Actor Loss: -423.7097702026367
Episode 2340: Time: 0.1471266746520996, Total Reward: 146.58762057878891, Q Loss: 423.3076171875, Actor Loss: -908.4315185546875
Episode 2341: Time: 0.2156543731689453, Total Reward: 221.49792008849772, Q Loss: 626.9848928451538, Actor Loss: -1307.8734855651855
Episode 2342: Time: 0.1296064853668213, Total Reward: 128.04202714822802, Q Loss: 360.4685707092285, Actor Loss: -781.2510414123535
Episode 2343: Time: 0.09559249877929688, Total Reward: 91.01590529061377, Q Loss: 279.1797285079956, Actor Loss: -590.6219902038574
Episode 2344: Time: 0.1125788688659668, Total Reward: 109.72806912204818, Q Loss: 339.3241386413574, Actor Loss: -688.4627685546875
Episode 2345: Time: 0.06100153923034668, Total Reward: 53.61236717899096, Q Loss: 163.61400413513184, Actor Loss: -360.08988189697266
Episode 2346: Time: 0.12222933769226074, Total Reward: 116.4614546799756, Q Loss: 331.14869499206543, Actor Loss: -724.5569763183594
Episode 2347: Time: 0.1297764778137207, Total Reward: 127.8836466969346, Q Loss: 374.8810443878174, Actor Loss: -796.0967597961426
Episode 2348: Time: 0.0957801342010498, Total Reward: 90.79486658233928, Q Loss: 313.08578872680664, Actor Loss: -561.9099769592285
Episode 2349: Time: 0.08643269538879395, Total Reward: 81.50467175267661, Q Loss: 338.7656478881836, Actor Loss: -534.7108383178711
Episode 2350: Time: 0.052057504653930664, Total Reward: 44.30866749567632, Q Loss: 141.55362033843994, Actor Loss: -331.28509521484375
Episode 2351: Time: 0.14732885360717773, Total Reward: 146.67020088507343, Q Loss: 540.7447576522827, Actor Loss: -886.2530899047852
Episode 2352: Time: 0.1466200351715088, Total Reward: 146.18819773135044, Q Loss: 443.194899559021, Actor Loss: -862.4180107116699
Episode 2353: Time: 0.209334135055542, Total Reward: 210.92103316135228, Q Loss: 565.1801013946533, Actor Loss: -1268.9701461791992
Episode 2354: Time: 0.0880124568939209, Total Reward: 81.31996180846726, Q Loss: 273.6705780029297, Actor Loss: -525.196159362793
Episode 2355: Time: 0.26001644134521484, Total Reward: 266.99432431152115, Q Loss: 868.1427545547485, Actor Loss: -1652.749355316162
Episode 2356: Time: 0.155548095703125, Total Reward: 155.89940393929453, Q Loss: 483.7626962661743, Actor Loss: -968.2664642333984

Episode 2357: Time: 0.17303466796875, Total Reward: 174.50572896992222, Q Loss: 510.7953290939331, Actor Loss: -1063.8994941711426
Episode 2358: Time: 0.12102961540222168, Total Reward: 117.68654956715648, Q Loss: 369.6242275238037, Actor Loss: -732.6786918640137
Episode 2359: Time: 0.16505193710327148, Total Reward: 164.5273927814642, Q Loss: 465.0025825500488, Actor Loss: -1031.0228843688965
Episode 2360: Time: 0.12147068977355957, Total Reward: 118.34444020889887, Q Loss: 432.52393531799316, Actor Loss: -761.8687438964844
Episode 2361: Time: 0.11029958724975586, Total Reward: 100.33961939157649, Q Loss: 370.3882064819336, Actor Loss: -643.7721786499023
Episode 2362: Time: 0.20940303802490234, Total Reward: 210.4488629101344, Q Loss: 650.2348041534424, Actor Loss: -1298.2317504882812
Episode 2363: Time: 0.12129426002502441, Total Reward: 118.50166068770564, Q Loss: 352.07124519348145, Actor Loss: -745.738842010498
Episode 2364: Time: 0.12150120735168457, Total Reward: 119.38084645217386, Q Loss: 336.39662075042725, Actor Loss: -741.6387214660645
Episode 2365: Time: 0.2164614200592041, Total Reward: 219.55151747135804, Q Loss: 741.3736705780029, Actor Loss: -1348.6509590148926
Episode 2366: Time: 0.17235088348388672, Total Reward: 174.12540108687875, Q Loss: 576.367919921875, Actor Loss: -1102.303524017334
Episode 2367: Time: 0.11261963844299316, Total Reward: 109.66340444535635, Q Loss: 389.524621963501, Actor Loss: -707.1602783203125
Episode 2368: Time: 0.15523672103881836, Total Reward: 155.56462548584634, Q Loss: 520.2726402282715, Actor Loss: -972.0097770690918
Episode 2369: Time: 0.44109153747558594, Total Reward: 461.92789852376757, Q Loss: 1532.6226844787598, Actor Loss: -2745.500556945801
Episode 2370: Time: 0.12096023559570312, Total Reward: 118.8784687261847, Q Loss: 451.1685733795166, Actor Loss: -806.6083183288574
Episode 2371: Time: 0.0780646800994873, Total Reward: 72.6156554889147, Q Loss: 298.4837474822998, Actor Loss: -503.69384765625
Episode 2372: Time: 0.09600114822387695, Total Reward: 91.25187519392364, Q Loss: 309.0703248977661, Actor Loss: -590.6047134399414
Episode 2373: Time: 0.1383833885192871, Total Reward: 136.75323621994704, Q Loss: 494.76294326782227, Actor Loss: -839.5371627807617
Episode 2374: Time: 0.06971073150634766, Total Reward: 63.04879077934349, Q Loss: 247.8547019958496, Actor Loss: -446.5437660217285
Episode 2375: Time: 0.13834261894226074, Total Reward: 137.75721743642342, Q Loss: 493.895565032959, Actor Loss: -895.7017288208008
Episode 2376: Time: 0.14750957489013672, Total Reward: 146.69316419963957, Q Loss: 464.9314022064209, Actor Loss: -954.5558090209961
Episode 2377: Time: 0.1984999179840088, Total Reward: 201.5689941323301, Q Loss: 747.0781650543213, Actor Loss: -1289.5927047729492
Episode 2378: Time: 0.07816505432128906, Total Reward: 72.38083654480853, Q Loss: 264.8139991760254, Actor Loss: -498.65378189086914
Episode 2379: Time: 0.10326313972473145, Total Reward: 100.20542608962424, Q Loss: 343.17125701904297, Actor Loss: -662.6702575683594
Episode 2380: Time: 0.3336813449859619, Total Reward: 321.79763917922725, Q Loss: 1061.5961532592773, Actor Loss: -2011.5788879394531
Episode 2381: Time: 0.14664125442504883, Total Reward: 146.64162546475933, Q Loss: 590.4708442687988, Actor Loss: -958.975643157959
Episode 2382: Time: 0.07830381393432617, Total Reward: 72.71622016204886, Q Loss: 319.0860080718994, Actor Loss: -512.8823089599609
Episode 2383: Time: 0.20705485343933105, Total Reward: 210.9468439176784, Q Loss: 814.688060760498, Actor Loss: -1369.926197052002
Episode 2384: Time: 0.16408753395080566, Total Reward: 165.7952725499273, Q Loss: 607.1910457611084, Actor Loss: -1057.211555480957

Episode 2385: Time: 0.0958261489868164, Total Reward: 89.61843032902112, Q Loss: 292.05203437805176, Actor Loss: -588.8064460754395
Episode 2386: Time: 0.23371577262878418, Total Reward: 239.8014825924762, Q Loss: 722.3582401275635, Actor Loss: -1476.9222946166992
Episode 2387: Time: 0.09535717964172363, Total Reward: 91.3117949032361, Q Loss: 371.5812816619873, Actor Loss: -626.6411552429199
Episode 2388: Time: 0.18161249160766602, Total Reward: 182.17968317947557, Q Loss: 670.2797107696533, Actor Loss: -1169.8341636657715
Episode 2389: Time: 0.1378641128540039, Total Reward: 137.55252095936723, Q Loss: 516.9355659484863, Actor Loss: -911.5843162536621
Episode 2390: Time: 0.16419529914855957, Total Reward: 165.0456881130216, Q Loss: 625.6038627624512, Actor Loss: -1058.4178276062012
Episode 2391: Time: 0.09488463401794434, Total Reward: 91.0675884225684, Q Loss: 325.0207414627075, Actor Loss: -605.7989196777344
Episode 2392: Time: 0.0863180160522461, Total Reward: 81.46658892024372, Q Loss: 319.5766201019287, Actor Loss: -567.4850883483887
Episode 2393: Time: 0.15572309494018555, Total Reward: 156.3436449910302, Q Loss: 645.8994331359863, Actor Loss: -1022.6712646484375
Episode 2394: Time: 0.1208195686340332, Total Reward: 119.2900836172697, Q Loss: 502.19474029541016, Actor Loss: -812.6001434326172
Episode 2395: Time: 0.06897950172424316, Total Reward: 63.06495740491625, Q Loss: 271.4921245574951, Actor Loss: -425.3009376525879
Episode 2396: Time: 0.23298072814941406, Total Reward: 238.85180583048052, Q Loss: 902.9747638702393, Actor Loss: -1549.005558013916
Episode 2397: Time: 0.24144411087036133, Total Reward: 247.28418551442311, Q Loss: 945.1329250335693, Actor Loss: -1585.0069160461426
Episode 2398: Time: 0.20848727226257324, Total Reward: 211.6128401277975, Q Loss: 738.3917102813721, Actor Loss: -1387.4436492919922
Episode 2399: Time: 0.155714750289917, Total Reward: 156.38230835601647, Q Loss: 589.2853260040283, Actor Loss: -1011.6163024902344
Validation Mean: 165.62697429620937, Validation Std: 74.57395673185772
saving model
Episode 2400: Time: 0.09587430953979492, Total Reward: 90.92973531908845, Q Loss: 277.2148389816284, Actor Loss: -576.84130859375
Episode 2401: Time: 0.07837367057800293, Total Reward: 72.02450383178126, Q Loss: 368.5720748901367, Actor Loss: -520.583122253418
Episode 2402: Time: 0.1126701831817627, Total Reward: 107.70494989515649, Q Loss: 458.87834548950195, Actor Loss: -738.7587013244629
Episode 2403: Time: 0.0951242446899414, Total Reward: 91.00823420976168, Q Loss: 371.9077396392822, Actor Loss: -645.5241622924805
Episode 2404: Time: 0.13860177993774414, Total Reward: 137.84561281648524, Q Loss: 580.6053981781006, Actor Loss: -912.2907676696777
Episode 2405: Time: 0.12099099159240723, Total Reward: 118.93609305297696, Q Loss: 461.6327323913574, Actor Loss: -811.7186851501465
Episode 2406: Time: 0.11250662803649902, Total Reward: 110.10698666005958, Q Loss: 405.9188461303711, Actor Loss: -704.4582901000977
Episode 2407: Time: 0.09503722190856934, Total Reward: 90.99020623524639, Q Loss: 361.93834114074707, Actor Loss: -630.5541229248047
Episode 2408: Time: 0.10347461700439453, Total Reward: 100.03449752508345, Q Loss: 384.1464080810547, Actor Loss: -688.2997589111328
Episode 2409: Time: 0.1468968391418457, Total Reward: 146.50578637847852, Q Loss: 606.5154628753662, Actor Loss: -985.2939796447754
Episode 2410: Time: 0.060430288314819336, Total Reward: 53.94092573680781, Q Loss: 240.27027893066406, Actor Loss: -419.02366638183594
Episode 2411: Time: 0.10342574119567871, Total Reward: 100.36067137383425, Q Loss: 356.456392288208, Actor Loss: -648.330738067627

Episode 2412: Time: 0.09521317481994629, Total Reward: 90.19967680490919, Q Loss: 378.8987693786621, Actor Loss: -598.810546875
Episode 2413: Time: 0.2508203983306885, Total Reward: 257.8958348362703, Q Loss: 1067.1664142608643, Actor Loss: -1712.347282409668
Episode 2414: Time: 0.24188661575317383, Total Reward: 247.5926421681329, Q Loss: 1048.740514755249, Actor Loss: -1579.9945373535156
Episode 2415: Time: 0.06933474540710449, Total Reward: 63.24009216606218, Q Loss: 314.0220432281494, Actor Loss: -458.22250747680664
Episode 2416: Time: 0.17291903495788574, Total Reward: 171.85657041648489, Q Loss: 781.5831890106201, Actor Loss: -1174.8008918762207
Episode 2417: Time: 0.11250734329223633, Total Reward: 109.33261221454232, Q Loss: 431.184476852417, Actor Loss: -728.0675811767578
Episode 2418: Time: 0.13006091117858887, Total Reward: 127.8439879285427, Q Loss: 525.9260320663452, Actor Loss: -824.9666862487793
Episode 2419: Time: 0.06086468696594238, Total Reward: 53.6036081179966, Q Loss: 222.4270305633545, Actor Loss: -411.5959243774414
Episode 2420: Time: 0.25060153007507324, Total Reward: 257.9659621006737, Q Loss: 969.6653499603271, Actor Loss: -1675.032154083252
Episode 2421: Time: 0.10318255424499512, Total Reward: 100.1568747741509, Q Loss: 470.49242782592773, Actor Loss: -695.375804901123
Episode 2422: Time: 0.12157607078552246, Total Reward: 119.05519789899036, Q Loss: 479.79992485046387, Actor Loss: -779.9645385742188
Episode 2423: Time: 0.12919306755065918, Total Reward: 127.70133117105394, Q Loss: 585.116886138916, Actor Loss: -865.0061264038086
Episode 2424: Time: 0.08662176132202148, Total Reward: 81.33153154018109, Q Loss: 388.4947338104248, Actor Loss: -556.5621795654297
Episode 2425: Time: 0.1977827548980713, Total Reward: 200.96687987741672, Q Loss: 959.7478523254395, Actor Loss: -1355.0975303649902
Episode 2426: Time: 0.03520846366882324, Total Reward: 26.053518615114687, Q Loss: 117.60633850097656, Actor Loss: -234.9371109008789
Episode 2427: Time: 0.05199623107910156, Total Reward: 44.22437364935541, Q Loss: 266.94237899780273, Actor Loss: -356.5936622619629
Episode 2428: Time: 0.06928157806396484, Total Reward: 63.376858723661606, Q Loss: 364.1182670593262, Actor Loss: -470.4773483276367
Episode 2429: Time: 0.09589886665344238, Total Reward: 89.98372459343214, Q Loss: 391.10551834106445, Actor Loss: -647.9351043701172
Episode 2430: Time: 0.17283201217651367, Total Reward: 173.93661085175668, Q Loss: 610.6029567718506, Actor Loss: -1109.2914543151855
Episode 2431: Time: 0.10416722297668457, Total Reward: 99.16148703758483, Q Loss: 506.290828704834, Actor Loss: -712.7884140014648
Episode 2432: Time: 0.06080341339111328, Total Reward: 53.58371194593286, Q Loss: 285.39081954956055, Actor Loss: -406.3829689025879
Episode 2433: Time: 0.10373473167419434, Total Reward: 100.42662751343752, Q Loss: 397.6309871673584, Actor Loss: -681.6848678588867
Episode 2434: Time: 0.061609506607055664, Total Reward: 53.46178676207736, Q Loss: 320.1338691711426, Actor Loss: -424.6319580078125
Episode 2435: Time: 0.0697476863861084, Total Reward: 62.713908099804904, Q Loss: 328.45056915283203, Actor Loss: -464.29748916625977
Episode 2436: Time: 0.06949806213378906, Total Reward: 63.08862738718741, Q Loss: 357.56945419311523, Actor Loss: -498.3649482727051
Episode 2437: Time: 0.07863926887512207, Total Reward: 72.42348420133139, Q Loss: 307.37927436828613, Actor Loss: -498.8196563720703
Episode 2438: Time: 0.20815134048461914, Total Reward: 210.96416995965205, Q Loss: 942.2816333770752, Actor Loss: -1416.7790145874023
Episode 2439: Time: 0.06945633888244629, Total Reward: 62.620805106226356, Q Loss: 335.98157501220703, Actor Loss: -461.79222106933594

Episode 2440: Time: 0.12094998359680176, Total Reward: 118.84790529036692, Q Loss: 618.2859706878662, Actor Loss: -807.3615570068359
Episode 2441: Time: 0.07001447677612305, Total Reward: 63.42871011435788, Q Loss: 309.6990213394165, Actor Loss: -436.8993721008301
Episode 2442: Time: 0.06941676139831543, Total Reward: 63.27663684824042, Q Loss: 353.5726566314697, Actor Loss: -443.98035049438477
Episode 2443: Time: 0.060752153396606445, Total Reward: 53.557341337440974, Q Loss: 333.68857192993164, Actor Loss: -409.40733337402344
Episode 2444: Time: 0.10443544387817383, Total Reward: 99.6201733208484, Q Loss: 550.0631847381592, Actor Loss: -726.3449058532715
Episode 2445: Time: 0.12939190864562988, Total Reward: 127.3932966205296, Q Loss: 615.0955810546875, Actor Loss: -872.8830718994141
Episode 2446: Time: 0.07823061943054199, Total Reward: 72.56846645006515, Q Loss: 374.2973117828369, Actor Loss: -528.8877830505371
Episode 2447: Time: 0.06079554557800293, Total Reward: 53.79212777052446, Q Loss: 255.89170837402344, Actor Loss: -429.6189498901367
Episode 2448: Time: 0.1121828556060791, Total Reward: 109.86217601554286, Q Loss: 533.3059520721436, Actor Loss: -750.9985237121582
Episode 2449: Time: 0.11252427101135254, Total Reward: 109.3739648361119, Q Loss: 497.32422637939453, Actor Loss: -774.8706817626953
Episode 2450: Time: 0.06943535804748535, Total Reward: 63.21146313552887, Q Loss: 338.72099685668945, Actor Loss: -501.24346923828125
Episode 2451: Time: 0.07785773277282715, Total Reward: 72.9046830934942, Q Loss: 313.76715087890625, Actor Loss: -515.494499206543
Episode 2452: Time: 0.09546041488647461, Total Reward: 91.47796223092277, Q Loss: 459.7938766479492, Actor Loss: -650.4174270629883
Episode 2453: Time: 0.10336589813232422, Total Reward: 100.0629558771605, Q Loss: 456.6511745452881, Actor Loss: -700.955451965332
Episode 2454: Time: 0.05191302299499512, Total Reward: 44.17128612556942, Q Loss: 195.84110641479492, Actor Loss: -331.88109588623047
Episode 2455: Time: 0.0780785083770752, Total Reward: 71.77510322711156, Q Loss: 282.8898067474365, Actor Loss: -517.0007247924805
Episode 2456: Time: 0.07760500907897949, Total Reward: 72.34776461311813, Q Loss: 331.95127296447754, Actor Loss: -501.33605575561523
Episode 2457: Time: 0.14693069458007812, Total Reward: 146.73807776112224, Q Loss: 698.6110897064209, Actor Loss: -1037.3356170654297
Episode 2458: Time: 0.2669558525085449, Total Reward: 276.4370655792855, Q Loss: 1170.5826358795166, Actor Loss: -1816.317039489746
Episode 2459: Time: 0.1034543514251709, Total Reward: 100.10035882626272, Q Loss: 550.9777355194092, Actor Loss: -742.0277137756348
Episode 2460: Time: 0.10367608070373535, Total Reward: 100.6882089980359, Q Loss: 475.23156356811523, Actor Loss: -740.9372291564941
Episode 2461: Time: 0.2669351100921631, Total Reward: 275.68160931181666, Q Loss: 1258.5149116516113, Actor Loss: -1791.571834564209
Episode 2462: Time: 0.0691823959350586, Total Reward: 62.95322940771267, Q Loss: 371.7092399597168, Actor Loss: -475.6374816894531
Episode 2463: Time: 0.21610331535339355, Total Reward: 220.2988412352666, Q Loss: 1179.7284412384033, Actor Loss: -1526.0344696044922
Episode 2464: Time: 0.2582671642303467, Total Reward: 267.20043289875827, Q Loss: 1169.2026062011719, Actor Loss: -1794.2889518737793
Episode 2465: Time: 0.16444873809814453, Total Reward: 163.57558562218782, Q Loss: 694.7408924102783, Actor Loss: -1132.7172622680664
Episode 2466: Time: 0.1469881534576416, Total Reward: 146.29282909648848, Q Loss: 706.0063285827637, Actor Loss: -1031.0487251281738
Episode 2467: Time: 0.24103283882141113, Total Reward: 247.85040800525718, Q Loss: 1121.4763069152832, Actor Loss: -1708.020606994629

Episode 2468: Time: 0.11201906204223633, Total Reward: 109.38331810166503, Q Loss: 482.4433345794678, Actor Loss: -778.4304847717285
Episode 2469: Time: 0.12085604667663574, Total Reward: 119.00327145489808, Q Loss: 541.2690391540527, Actor Loss: -855.0071067810059
Episode 2470: Time: 0.13736939430236816, Total Reward: 137.50319914770236, Q Loss: 664.5169906616211, Actor Loss: -969.3121376037598
Episode 2471: Time: 0.2069551944732666, Total Reward: 211.8297856997405, Q Loss: 1040.22780418396, Actor Loss: -1441.909839630127
Episode 2472: Time: 0.10344552993774414, Total Reward: 100.08771286452509, Q Loss: 486.5659484863281, Actor Loss: -752.55615234375
Episode 2473: Time: 0.1378467082977295, Total Reward: 137.61551464335344, Q Loss: 651.2910499572754, Actor Loss: -962.4799003601074
Episode 2474: Time: 0.15481066703796387, Total Reward: 154.2702505304005, Q Loss: 773.4668292999268, Actor Loss: -1078.7106819152832
Episode 2475: Time: 0.12946867942810059, Total Reward: 127.73286551915892, Q Loss: 631.864336013794, Actor Loss: -914.9886627197266
Episode 2476: Time: 0.08601927757263184, Total Reward: 81.53558230934819, Q Loss: 389.48070335388184, Actor Loss: -582.3199691772461
Episode 2477: Time: 0.16407251358032227, Total Reward: 165.73040695284908, Q Loss: 812.8292350769043, Actor Loss: -1182.0283164978027
Episode 2478: Time: 0.1889333724975586, Total Reward: 193.22671797139853, Q Loss: 1031.549711227417, Actor Loss: -1310.6239929199219
Episode 2479: Time: 0.061159610748291016, Total Reward: 53.2515106515889, Q Loss: 290.73418045043945, Actor Loss: -406.0725440979004
Episode 2480: Time: 0.3102543354034424, Total Reward: 323.5724331635742, Q Loss: 1703.9035758972168, Actor Loss: -2198.131660461426
Episode 2481: Time: 0.19860029220581055, Total Reward: 201.32882337158372, Q Loss: 1072.1968784332275, Actor Loss: -1398.4552268981934
Episode 2482: Time: 0.14694929122924805, Total Reward: 145.94166215374563, Q Loss: 760.565601348877, Actor Loss: -1025.8333435058594
Episode 2483: Time: 0.13801169395446777, Total Reward: 137.41199130048162, Q Loss: 748.2672920227051, Actor Loss: -1001.4061164855957
Episode 2484: Time: 0.1381824016571045, Total Reward: 137.2959640402564, Q Loss: 807.1269092559814, Actor Loss: -958.8754692077637
Episode 2485: Time: 0.10350775718688965, Total Reward: 100.30180724597263, Q Loss: 547.4002933502197, Actor Loss: -741.4796524047852
Episode 2486: Time: 0.11238431930541992, Total Reward: 109.03374726741197, Q Loss: 628.751874923706, Actor Loss: -822.4398574829102
Episode 2487: Time: 0.18043971061706543, Total Reward: 184.10354065415794, Q Loss: 979.9236698150635, Actor Loss: -1310.233283996582
Episode 2488: Time: 0.10368537902832031, Total Reward: 100.5562261241822, Q Loss: 569.7848224639893, Actor Loss: -731.1503486633301
Episode 2489: Time: 0.1375894546508789, Total Reward: 137.72471859381827, Q Loss: 767.2716999053955, Actor Loss: -969.7861518859863
Episode 2490: Time: 0.06939148902893066, Total Reward: 62.336907907729085, Q Loss: 344.3805904388428, Actor Loss: -482.1972999572754
Episode 2491: Time: 0.12035918235778809, Total Reward: 118.76714530441424, Q Loss: 588.4506721496582, Actor Loss: -867.0933799743652
Episode 2492: Time: 0.10376310348510742, Total Reward: 100.30050903576732, Q Loss: 689.7024765014648, Actor Loss: -723.8484954833984
Episode 2493: Time: 0.0776209831237793, Total Reward: 71.90555268407515, Q Loss: 484.2038269042969, Actor Loss: -568.4557609558105
Episode 2494: Time: 0.17309212684631348, Total Reward: 175.03977943133455, Q Loss: 875.0870265960693, Actor Loss: -1249.6396827697754
Episode 2495: Time: 0.11198163032531738, Total Reward: 109.95293971075432, Q Loss: 637.839937210083, Actor Loss: -799.531681060791

Episode 2496: Time: 0.09560084342956543, Total Reward: 91.03150063483413, Q Loss: 633.2448348999023, Actor Loss: -701.9077949523926
Episode 2497: Time: 0.10333037376403809, Total Reward: 99.76242348473535, Q Loss: 590.4518604278564, Actor Loss: -761.5908203125
Episode 2498: Time: 0.12096834182739258, Total Reward: 118.4018339171761, Q Loss: 707.3352546691895, Actor Loss: -866.6684265136719
Episode 2499: Time: 0.1464691162109375, Total Reward: 146.60676378591046, Q Loss: 934.7937126159668, Actor Loss: -1078.627254486084
Validation Mean: 186.08172446466997, Validation Std: 81.90766567435332
saving model
Episode 2500: Time: 0.11275172233581543, Total Reward: 109.64522479697004, Q Loss: 631.4726257324219, Actor Loss: -814.4493446350098
Episode 2501: Time: 0.09544539451599121, Total Reward: 90.99994086932232, Q Loss: 496.1430320739746, Actor Loss: -653.5242805480957
Episode 2502: Time: 0.1377124786376953, Total Reward: 136.80639477932243, Q Loss: 828.6683654785156, Actor Loss: -940.367504119873
Episode 2503: Time: 0.146773099899292, Total Reward: 146.5539473155675, Q Loss: 833.0009918212891, Actor Loss: -1044.4723052978516
Episode 2504: Time: 0.1122126579284668, Total Reward: 109.55409290543639, Q Loss: 671.5073776245117, Actor Loss: -819.0110397338867
Episode 2505: Time: 0.06928753852844238, Total Reward: 63.26918572529317, Q Loss: 321.14316749572754, Actor Loss: -510.4254150390625
Episode 2506: Time: 0.07826089859008789, Total Reward: 71.94083212663843, Q Loss: 384.925838470459, Actor Loss: -540.9529266357422
Episode 2507: Time: 0.08652400970458984, Total Reward: 81.2964249075813, Q Loss: 488.98807525634766, Actor Loss: -626.7219390869141
Episode 2508: Time: 0.15543222427368164, Total Reward: 155.99130852182907, Q Loss: 934.427619934082, Actor Loss: -1137.064151763916
Episode 2509: Time: 0.18082594871520996, Total Reward: 183.11958976186085, Q Loss: 1047.0164833068848, Actor Loss: -1315.0641784667969
Episode 2510: Time: 0.34429287910461426, Total Reward: 359.35607002864043, Q Loss: 2003.779375076294, Actor Loss: -2482.4138145446777
Episode 2511: Time: 0.2583169937133789, Total Reward: 267.1068118026142, Q Loss: 1643.6332817077637, Actor Loss: -1867.190803527832
Episode 2512: Time: 0.16376996040344238, Total Reward: 164.01406903290348, Q Loss: 957.599817276001, Actor Loss: -1171.7004280090332
Episode 2513: Time: 0.10392570495605469, Total Reward: 100.6814000901133, Q Loss: 612.7321434020996, Actor Loss: -726.0298156738281
Episode 2514: Time: 0.24341106414794922, Total Reward: 248.12752095575345, Q Loss: 1294.4985637664795, Actor Loss: -1743.784812927246
Episode 2515: Time: 0.1248319149017334, Total Reward: 119.29847835337965, Q Loss: 607.083911895752, Actor Loss: -836.8936347961426
Episode 2516: Time: 0.18217182159423828, Total Reward: 184.3056114720536, Q Loss: 1128.7664833068848, Actor Loss: -1375.4768600463867
Episode 2517: Time: 0.07872581481933594, Total Reward: 72.66542266152702, Q Loss: 458.40101623535156, Actor Loss: -571.7355613708496
Episode 2518: Time: 0.21703004837036133, Total Reward: 221.37750322230175, Q Loss: 1236.6272525787354, Actor Loss: -1572.4444274902344
Episode 2519: Time: 0.1214287281036377, Total Reward: 119.29901874374612, Q Loss: 632.8903522491455, Actor Loss: -864.550910949707
Episode 2520: Time: 0.2168118953704834, Total Reward: 219.90553868709924, Q Loss: 1470.7411518096924, Actor Loss: -1622.6091423034668
Episode 2521: Time: 0.09597611427307129, Total Reward: 91.08551541444373, Q Loss: 610.1505279541016, Actor Loss: -678.57958984375
Episode 2522: Time: 0.225799560546875, Total Reward: 230.7039414992693, Q Loss: 1355.768898010254, Actor Loss: -1674.1439361572266

Episode 2523: Time: 0.12111234664916992, Total Reward: 118.80509819131213, Q Loss: 725.145263671875, Actor Loss: -900.8947982788086
Episode 2524: Time: 0.08666682243347168, Total Reward: 81.7620068720209, Q Loss: 597.7369842529297, Actor Loss: -666.7282371520996
Episode 2525: Time: 0.1465282440185547, Total Reward: 146.58223716430555, Q Loss: 1002.5525550842285, Actor Loss: -1132.3564338684082
Episode 2526: Time: 0.10413217544555664, Total Reward: 100.53529622469439, Q Loss: 671.1096115112305, Actor Loss: -743.9491653442383
Episode 2527: Time: 0.15543532371520996, Total Reward: 156.0844085016395, Q Loss: 872.1281261444092, Actor Loss: -1161.2930030822754
Episode 2528: Time: 0.12165594100952148, Total Reward: 119.1114538474082, Q Loss: 624.0789375305176, Actor Loss: -863.7372932434082
Episode 2529: Time: 0.13002967834472656, Total Reward: 127.63437557927746, Q Loss: 765.3307266235352, Actor Loss: -927.032096862793
Episode 2530: Time: 0.11314940452575684, Total Reward: 109.34850364157026, Q Loss: 837.073787689209, Actor Loss: -784.8933639526367
Episode 2531: Time: 0.05233597755432129, Total Reward: 44.45372581304218, Q Loss: 365.71763610839844, Actor Loss: -386.9790954589844
Episode 2532: Time: 0.18250823020935059, Total Reward: 181.52273913740058, Q Loss: 1039.3473300933838, Actor Loss: -1361.3520736694336
Episode 2533: Time: 0.09535717964172363, Total Reward: 91.04552148238423, Q Loss: 539.5700244903564, Actor Loss: -695.3917579650879
Episode 2534: Time: 0.19021201133728027, Total Reward: 193.32593362330311, Q Loss: 1085.0167064666748, Actor Loss: -1408.4557876586914
Episode 2535: Time: 0.18114757537841797, Total Reward: 182.25998644167856, Q Loss: 1135.3861808776855, Actor Loss: -1355.6905899047852
Episode 2536: Time: 0.11268973350524902, Total Reward: 110.18484775691503, Q Loss: 723.8656272888184, Actor Loss: -824.5198745727539
Episode 2537: Time: 0.0692446231842041, Total Reward: 62.99641402824881, Q Loss: 389.34240341186523, Actor Loss: -497.306396484375
Episode 2538: Time: 0.060562849044799805, Total Reward: 54.12212289101612, Q Loss: 385.36957931518555, Actor Loss: -415.8041763305664
Episode 2539: Time: 0.07807707786560059, Total Reward: 72.426932108593, Q Loss: 559.92236328125, Actor Loss: -545.6931686401367
Episode 2540: Time: 0.16350340843200684, Total Reward: 164.93686932571006, Q Loss: 895.8521919250488, Actor Loss: -1215.1457557678223
Episode 2541: Time: 0.09523129463195801, Total Reward: 91.09317524244652, Q Loss: 586.9273109436035, Actor Loss: -699.559253692627
Episode 2542: Time: 0.12043046951293945, Total Reward: 118.50694187095937, Q Loss: 639.9227600097656, Actor Loss: -915.6392822265625
Episode 2543: Time: 0.20682239532470703, Total Reward: 209.86238343864125, Q Loss: 1387.485523223877, Actor Loss: -1550.577003479004
Episode 2544: Time: 0.06044292449951172, Total Reward: 53.23715622561374, Q Loss: 414.7930488586426, Actor Loss: -442.77332305908203
Episode 2545: Time: 0.0947418212890625, Total Reward: 91.71311229929367, Q Loss: 675.3944683074951, Actor Loss: -714.9148597717285
Episode 2546: Time: 0.07786107063293457, Total Reward: 72.5884446162982, Q Loss: 474.1522102355957, Actor Loss: -573.7106590270996
Episode 2547: Time: 0.10347223281860352, Total Reward: 100.30798437815008, Q Loss: 680.8730621337891, Actor Loss: -781.6374473571777
Episode 2548: Time: 0.24147558212280273, Total Reward: 248.6446667593936, Q Loss: 1452.3002262115479, Actor Loss: -1788.8418807983398
Episode 2549: Time: 0.07816624641418457, Total Reward: 72.5446674331796, Q Loss: 521.7724342346191, Actor Loss: -593.4612045288086
Episode 2550: Time: 0.24185776710510254, Total Reward: 249.01138027801656, Q Loss: 1587.3763465881348, Actor Loss: -1859.7959823608398

Episode 2551: Time: 0.1382122039794922, Total Reward: 137.68894984026488, Q Loss: 901.3208389282227, Actor Loss: -1029.5627479553223
Episode 2552: Time: 0.18973755836486816, Total Reward: 191.72135934616455, Q Loss: 1266.9272346496582, Actor Loss: -1497.3589248657227
Episode 2553: Time: 0.10359048843383789, Total Reward: 100.10092780410213, Q Loss: 701.6294631958008, Actor Loss: -783.7894744873047
Episode 2554: Time: 0.06891155242919922, Total Reward: 63.15321990796191, Q Loss: 470.58526039123535, Actor Loss: -529.8688926696777
Episode 2555: Time: 0.1900167465209961, Total Reward: 193.11349857536354, Q Loss: 1402.1566543579102, Actor Loss: -1421.198013305664
Episode 2556: Time: 0.09500932693481445, Total Reward: 90.97346829505982, Q Loss: 652.259349822998, Actor Loss: -690.9714622497559
Episode 2557: Time: 0.06921648979187012, Total Reward: 63.18274716810023, Q Loss: 499.042179107666, Actor Loss: -517.3095207214355
Episode 2558: Time: 0.26749300956726074, Total Reward: 276.09414908619607, Q Loss: 1910.5382995605469, Actor Loss: -2018.3469467163086
Episode 2559: Time: 0.1895754337310791, Total Reward: 193.30705918653084, Q Loss: 1303.4043655395508, Actor Loss: -1465.284309387207
Episode 2560: Time: 0.0782785415649414, Total Reward: 72.34305278196676, Q Loss: 497.9432907104492, Actor Loss: -588.0326042175293
Episode 2561: Time: 0.12039828300476074, Total Reward: 119.37929723448234, Q Loss: 800.3456878662109, Actor Loss: -911.215648651123
Episode 2562: Time: 0.07769775390625, Total Reward: 72.72850680218131, Q Loss: 621.3771057128906, Actor Loss: -552.2744941711426
Episode 2563: Time: 0.22489356994628906, Total Reward: 230.53075154004617, Q Loss: 1378.1829357147217, Actor Loss: -1659.029094696045
Episode 2564: Time: 0.2330613136291504, Total Reward: 238.8729854179613, Q Loss: 1433.9688873291016, Actor Loss: -1772.38427734375
Episode 2565: Time: 0.1294112205505371, Total Reward: 128.2827840227182, Q Loss: 1021.8425216674805, Actor Loss: -977.4687156677246
Episode 2566: Time: 0.07837820053100586, Total Reward: 72.47938925113594, Q Loss: 508.7461128234863, Actor Loss: -606.8216438293457
Episode 2567: Time: 0.1353774070739746, Total Reward: 127.2676354237359, Q Loss: 978.4859809875488, Actor Loss: -1011.8248519897461
Episode 2568: Time: 0.11262130737304688, Total Reward: 109.93013272610247, Q Loss: 816.7799301147461, Actor Loss: -876.337574005127
Episode 2569: Time: 0.13799715042114258, Total Reward: 136.888299826895, Q Loss: 932.4743957519531, Actor Loss: -1094.1604385375977
Episode 2570: Time: 0.12976861000061035, Total Reward: 128.12508255644585, Q Loss: 994.368034362793, Actor Loss: -1040.627914428711
Episode 2571: Time: 0.28462791442871094, Total Reward: 295.25529992899686, Q Loss: 1944.9558753967285, Actor Loss: -2210.8193321228027
Episode 2572: Time: 0.11212825775146484, Total Reward: 109.51316056683888, Q Loss: 819.6974868774414, Actor Loss: -862.7164649963379
Episode 2573: Time: 0.18134427070617676, Total Reward: 182.80079588137798, Q Loss: 1276.457176208496, Actor Loss: -1374.271369934082
Episode 2574: Time: 0.12119197845458984, Total Reward: 118.1558349338959, Q Loss: 764.5328578948975, Actor Loss: -943.7721214294434
Episode 2575: Time: 0.1098790168762207, Total Reward: 99.94493774818865, Q Loss: 706.149263381958, Actor Loss: -789.8993110656738
Episode 2576: Time: 0.11308741569519043, Total Reward: 109.73245209053442, Q Loss: 789.5376434326172, Actor Loss: -878.5540084838867
Episode 2577: Time: 0.06958723068237305, Total Reward: 62.62053955395871, Q Loss: 534.1029510498047, Actor Loss: -511.1687202453613
Episode 2578: Time: 0.07882976531982422, Total Reward: 72.17450215817915, Q Loss: 568.3864440917969, Actor Loss: -599.4824409484863

Episode 2579: Time: 0.10421967506408691, Total Reward: 100.60736111479677, Q Loss: 836.5382041931152, Actor Loss: -801.6266441345215
Episode 2580: Time: 0.18215298652648926, Total Reward: 184.01400267220237, Q Loss: 1415.134750366211, Actor Loss: -1405.2441635131836
Episode 2581: Time: 0.06944632530212402, Total Reward: 62.703565400438166, Q Loss: 436.7718048095703, Actor Loss: -530.7387199401855
Episode 2582: Time: 0.37964701652526855, Total Reward: 395.66912219981685, Q Loss: 2931.873634338379, Actor Loss: -2901.6246223449707
Episode 2583: Time: 0.2851572036743164, Total Reward: 295.7950590258149, Q Loss: 1971.5864944458008, Actor Loss: -2198.1966514587402
Episode 2584: Time: 0.1467270851135254, Total Reward: 146.3143443446381, Q Loss: 984.2246246337891, Actor Loss: -1133.6488647460938
Episode 2585: Time: 0.10395312309265137, Total Reward: 100.69314053816986, Q Loss: 753.8768997192383, Actor Loss: -814.2011909484863
Episode 2586: Time: 0.2167344093322754, Total Reward: 221.0282266385386, Q Loss: 1619.6218376159668, Actor Loss: -1674.221523284912
Episode 2587: Time: 0.09511542320251465, Total Reward: 89.95953406976503, Q Loss: 716.3097648620605, Actor Loss: -783.7046852111816
Episode 2588: Time: 0.15570569038391113, Total Reward: 154.9702118623655, Q Loss: 1216.4225845336914, Actor Loss: -1170.7805709838867
Episode 2589: Time: 0.09496784210205078, Total Reward: 90.92015255057579, Q Loss: 710.974609375, Actor Loss: -756.0925636291504
Episode 2590: Time: 0.10349440574645996, Total Reward: 100.60810370070377, Q Loss: 830.4163970947266, Actor Loss: -856.6180839538574
Episode 2591: Time: 0.1223149299621582, Total Reward: 118.17922289549742, Q Loss: 908.027021408081, Actor Loss: -954.1936721801758
Episode 2592: Time: 0.22650384902954102, Total Reward: 229.31893943791624, Q Loss: 2010.265537261963, Actor Loss: -1744.6649856567383
Episode 2593: Time: 0.13018178939819336, Total Reward: 128.71783409692617, Q Loss: 960.7408905029297, Actor Loss: -1052.1376876831055
Episode 2594: Time: 0.260333776473999, Total Reward: 266.84716641271206, Q Loss: 1645.7971839904785, Actor Loss: -2008.0602951049805
Episode 2595: Time: 0.26871681213378906, Total Reward: 273.9836832242835, Q Loss: 2048.819965362549, Actor Loss: -2179.4163818359375
Episode 2596: Time: 0.06968259811401367, Total Reward: 62.69376129732779, Q Loss: 419.65710830688477, Actor Loss: -517.9839096069336
Episode 2597: Time: 0.20815277099609375, Total Reward: 210.65909394391227, Q Loss: 1700.2423858642578, Actor Loss: -1648.2568016052246
Episode 2598: Time: 0.2513301372528076, Total Reward: 258.28465959935403, Q Loss: 1768.013298034668, Actor Loss: -1971.8641662597656
Episode 2599: Time: 0.12093615531921387, Total Reward: 119.12062482321286, Q Loss: 784.8575954437256, Actor Loss: -951.1455459594727
Validation Mean: 276.7241983051547, Validation Std: 126.22146519520926
saving model
Episode 2600: Time: 0.20149636268615723, Total Reward: 203.01043208542015, Q Loss: 1465.1770057678223, Actor Loss: -1548.1080055236816
Episode 2601: Time: 0.104827880859375, Total Reward: 99.95962840672367, Q Loss: 824.14306640625, Actor Loss: -827.1939926147461
Episode 2602: Time: 0.06963658332824707, Total Reward: 63.2997129864981, Q Loss: 509.53981018066406, Actor Loss: -542.8053779602051
Episode 2603: Time: 0.2766101360321045, Total Reward: 285.3992187398055, Q Loss: 2149.8066177368164, Actor Loss: -2247.119560241699
Episode 2604: Time: 0.15508508682250977, Total Reward: 154.4166145692651, Q Loss: 1187.2118492126465, Actor Loss: -1286.1388130187988
Episode 2605: Time: 0.07030630111694336, Total Reward: 62.857354240298406, Q Loss: 544.0354690551758, Actor Loss: -542.393009185791

Episode 2606: Time: 0.2071082592010498, Total Reward: 211.5262480066379, Q Loss: 1618.3371124267578, Actor Loss: -1635.8506126403809
Episode 2607: Time: 0.3109769821166992, Total Reward: 321.97522884964593, Q Loss: 2392.1396141052246, Actor Loss: -2508.7419090270996
Episode 2608: Time: 0.18161344528198242, Total Reward: 184.49447551709238, Q Loss: 1423.1826171875, Actor Loss: -1448.8400039672852
Episode 2609: Time: 0.14760851860046387, Total Reward: 147.16889502359962, Q Loss: 987.5612678527832, Actor Loss: -1156.9227561950684
Episode 2610: Time: 0.18086552619934082, Total Reward: 183.08061870892368, Q Loss: 1454.753330230713, Actor Loss: -1437.1553077697754
Episode 2611: Time: 0.1640336513519287, Total Reward: 165.23366565518953, Q Loss: 1362.5700759887695, Actor Loss: -1304.261131286621
Episode 2612: Time: 0.1899547576904297, Total Reward: 193.59468599233549, Q Loss: 1639.2785949707031, Actor Loss: -1499.6150093078613
Episode 2613: Time: 0.06957888603210449, Total Reward: 62.504296489202865, Q Loss: 528.7755546569824, Actor Loss: -582.1940383911133
Episode 2614: Time: 0.12929105758666992, Total Reward: 128.40070789194922, Q Loss: 1184.6532516479492, Actor Loss: -1080.1620254516602
Episode 2615: Time: 0.2584364414215088, Total Reward: 266.7583189433261, Q Loss: 2052.4003295898438, Actor Loss: -2122.3862686157227
Episode 2616: Time: 0.13758134841918945, Total Reward: 137.64254400928243, Q Loss: 1343.2014465332031, Actor Loss: -1159.36625289917
Episode 2617: Time: 0.2582969665527344, Total Reward: 266.8947909096434, Q Loss: 1937.4738960266113, Actor Loss: -2054.0092964172363
Episode 2618: Time: 0.12163376808166504, Total Reward: 118.87938907304111, Q Loss: 847.8154258728027, Actor Loss: -988.1836280822754
Episode 2619: Time: 0.1215066909790039, Total Reward: 118.58592472901911, Q Loss: 1036.0119438171387, Actor Loss: -944.5243225097656
Episode 2620: Time: 0.1474897861480713, Total Reward: 146.1430667227341, Q Loss: 1164.1135749816895, Actor Loss: -1179.9388847351074
Episode 2621: Time: 0.08728814125061035, Total Reward: 82.1277761521528, Q Loss: 671.5833702087402, Actor Loss: -688.2009353637695
Episode 2622: Time: 0.0780494213104248, Total Reward: 72.83358023823722, Q Loss: 615.57373046875, Actor Loss: -681.6323852539062
Episode 2623: Time: 0.08681869506835938, Total Reward: 80.73147713722116, Q Loss: 665.5713996887207, Actor Loss: -718.9323501586914
Episode 2624: Time: 0.06963992118835449, Total Reward: 62.024839008958146, Q Loss: 646.7882232666016, Actor Loss: -572.5958786010742
Episode 2625: Time: 0.10399198532104492, Total Reward: 100.41500724158684, Q Loss: 921.6641654968262, Actor Loss: -839.9706764221191
Episode 2626: Time: 0.13910651206970215, Total Reward: 137.93284805018794, Q Loss: 1164.0602722167969, Actor Loss: -1119.220932006836
Episode 2627: Time: 0.16439485549926758, Total Reward: 165.02495402111555, Q Loss: 1360.2192192077637, Actor Loss: -1357.997673034668
Episode 2628: Time: 0.16512322425842285, Total Reward: 163.30892946802913, Q Loss: 1363.9560585021973, Actor Loss: -1381.965217590332
Episode 2629: Time: 0.14734625816345215, Total Reward: 146.44461922532537, Q Loss: 1206.3377227783203, Actor Loss: -1166.0407981872559
Episode 2630: Time: 0.11291122436523438, Total Reward: 109.5322730624778, Q Loss: 877.6205062866211, Actor Loss: -927.2608032226562
Episode 2631: Time: 0.1553514003753662, Total Reward: 155.58226831814747, Q Loss: 1189.8406257629395, Actor Loss: -1248.6996040344238
Episode 2632: Time: 0.16408038139343262, Total Reward: 165.18681648279588, Q Loss: 1226.6313705444336, Actor Loss: -1331.1437797546387
Episode 2633: Time: 0.08641576766967773, Total Reward: 81.86370376635895, Q Loss: 824.4196891784668, Actor Loss: -709.5443725585938

Episode 2634: Time: 0.12151575088500977, Total Reward: 117.61770544605884, Q Loss: 966.0230102539062, Actor Loss: -961.7637329101562
Episode 2635: Time: 0.2246112823486328, Total Reward: 231.12983855210905, Q Loss: 2021.613868713379, Actor Loss: -1832.0261497497559
Episode 2636: Time: 0.1643509864807129, Total Reward: 164.25616832731993, Q Loss: 1384.8251342773438, Actor Loss: -1369.941047668457
Episode 2637: Time: 0.14754557609558105, Total Reward: 146.72250894460493, Q Loss: 1108.106159210205, Actor Loss: -1164.0775451660156
Episode 2638: Time: 0.18089723587036133, Total Reward: 183.5528261270233, Q Loss: 1473.9245986938477, Actor Loss: -1524.0141944885254
Episode 2639: Time: 0.06091141700744629, Total Reward: 53.973505928983364, Q Loss: 450.91405487060547, Actor Loss: -504.10514068603516
Episode 2640: Time: 0.10421395301818848, Total Reward: 100.44905110974493, Q Loss: 847.6812171936035, Actor Loss: -817.4995422363281
Episode 2641: Time: 0.27689456939697266, Total Reward: 284.58120958137215, Q Loss: 2474.462471008301, Actor Loss: -2244.657127380371
Episode 2642: Time: 0.3019850254058838, Total Reward: 312.8204310409469, Q Loss: 2503.0987606048584, Actor Loss: -2485.798469543457
Episode 2643: Time: 0.12096214294433594, Total Reward: 118.89331324147027, Q Loss: 1126.220859527588, Actor Loss: -1007.0162811279297
Episode 2644: Time: 0.13040494918823242, Total Reward: 128.23000354260208, Q Loss: 1006.7077293395996, Actor Loss: -1064.9052391052246
Episode 2645: Time: 0.29491376876831055, Total Reward: 304.56949822660425, Q Loss: 2693.744804382324, Actor Loss: -2394.844341278076
Episode 2646: Time: 0.06954336166381836, Total Reward: 62.60344753165203, Q Loss: 765.979621887207, Actor Loss: -538.6235389709473
Episode 2647: Time: 0.19913911819458008, Total Reward: 203.50008454152248, Q Loss: 1761.070655822754, Actor Loss: -1641.1028175354004
Episode 2648: Time: 0.22606229782104492, Total Reward: 229.1205862008616, Q Loss: 1787.6526641845703, Actor Loss: -1778.5237617492676
Episode 2649: Time: 0.19860434532165527, Total Reward: 201.8617457995896, Q Loss: 1588.8136672973633, Actor Loss: -1613.4974822998047
Episode 2650: Time: 0.1471705436706543, Total Reward: 146.48319795619685, Q Loss: 1238.9426307678223, Actor Loss: -1209.014305114746
Episode 2651: Time: 0.13837814331054688, Total Reward: 137.50617731215698, Q Loss: 1199.0092468261719, Actor Loss: -1145.9235076904297
Episode 2652: Time: 0.2934846878051758, Total Reward: 304.51272602417964, Q Loss: 2651.418186187744, Actor Loss: -2429.6915740966797
Episode 2653: Time: 0.08648300170898438, Total Reward: 82.1457762745345, Q Loss: 720.8004608154297, Actor Loss: -694.9972648620605
Episode 2654: Time: 0.1558988094329834, Total Reward: 155.72668771957052, Q Loss: 1568.7647552490234, Actor Loss: -1362.2397766113281
Episode 2655: Time: 0.15531611442565918, Total Reward: 155.6074728586774, Q Loss: 1461.4220962524414, Actor Loss: -1306.2966766357422
Episode 2656: Time: 0.12158846855163574, Total Reward: 119.44650997403603, Q Loss: 1074.934440612793, Actor Loss: -1039.8062286376953
Episode 2657: Time: 0.11229968070983887, Total Reward: 108.9885217658987, Q Loss: 1007.5238456726074, Actor Loss: -928.643424987793
Episode 2658: Time: 0.19870448112487793, Total Reward: 200.99972205274102, Q Loss: 1705.7907180786133, Actor Loss: -1683.093505859375
Episode 2659: Time: 0.12069821357727051, Total Reward: 118.18887311960168, Q Loss: 1101.421672821045, Actor Loss: -1042.9026336669922
Episode 2660: Time: 0.2507035732269287, Total Reward: 257.884831934067, Q Loss: 2319.0567359924316, Actor Loss: -2113.455539703369
Episode 2661: Time: 0.06072211265563965, Total Reward: 53.39504882605989, Q Loss: 536.2494163513184, Actor Loss: -534.7491836547852

Episode 2662: Time: 0.3103759288787842, Total Reward: 321.5409866470958, Q Loss: 2728.3710899353027, Actor Loss: -2590.930709838867
Episode 2663: Time: 0.12076473236083984, Total Reward: 118.66493756539222, Q Loss: 1166.5680656433105, Actor Loss: -1044.1686630249023
Episode 2664: Time: 0.12139248847961426, Total Reward: 118.85814566024392, Q Loss: 1180.498722076416, Actor Loss: -1025.821434020996
Episode 2665: Time: 0.2328042984008789, Total Reward: 238.62603272280543, Q Loss: 2035.1372718811035, Actor Loss: -1999.1032676696777
Episode 2666: Time: 0.20662236213684082, Total Reward: 211.49046842366323, Q Loss: 1963.2746086120605, Actor Loss: -1784.6154251098633
Episode 2667: Time: 0.154860258102417, Total Reward: 155.39476228590124, Q Loss: 1403.6847343444824, Actor Loss: -1329.4147186279297
Episode 2668: Time: 0.2927515506744385, Total Reward: 304.9313184274751, Q Loss: 3039.603889465332, Actor Loss: -2495.67818069458
Episode 2669: Time: 0.10362768173217773, Total Reward: 100.36108357568696, Q Loss: 1053.3823623657227, Actor Loss: -887.5879364013672
Episode 2670: Time: 0.17284774780273438, Total Reward: 174.20030204168089, Q Loss: 1832.387996673584, Actor Loss: -1526.5183944702148
Episode 2671: Time: 0.10342025756835938, Total Reward: 100.22940927544903, Q Loss: 1008.2964019775391, Actor Loss: -892.0400352478027
Episode 2672: Time: 0.06962275505065918, Total Reward: 63.211971745298015, Q Loss: 655.015697479248, Actor Loss: -603.1513290405273
Episode 2673: Time: 0.147993803024292, Total Reward: 147.15670807848852, Q Loss: 1587.0591201782227, Actor Loss: -1258.7643699645996
Episode 2674: Time: 0.18087387084960938, Total Reward: 183.93940377894515, Q Loss: 1922.417552947998, Actor Loss: -1597.3770904541016
Episode 2675: Time: 0.11231660842895508, Total Reward: 109.09125350032285, Q Loss: 1012.2370948791504, Actor Loss: -951.4435920715332
Episode 2676: Time: 0.10316991806030273, Total Reward: 100.47086440031029, Q Loss: 1018.8176116943359, Actor Loss: -933.5170669555664
Episode 2677: Time: 0.24128317832946777, Total Reward: 248.79337410807497, Q Loss: 2402.1073150634766, Actor Loss: -2020.2107238769531
Episode 2678: Time: 0.12894773483276367, Total Reward: 129.0383087708134, Q Loss: 1183.498556137085, Actor Loss: -1097.6252899169922
Episode 2679: Time: 0.08664321899414062, Total Reward: 81.45366204298797, Q Loss: 844.2245292663574, Actor Loss: -747.3071212768555
Episode 2680: Time: 0.07780933380126953, Total Reward: 72.58901308097064, Q Loss: 822.981128692627, Actor Loss: -680.7624588012695
Episode 2681: Time: 0.14676880836486816, Total Reward: 145.8043709192637, Q Loss: 1345.3585090637207, Actor Loss: -1198.9147911071777
Episode 2682: Time: 0.09469246864318848, Total Reward: 90.57082285273684, Q Loss: 916.8694248199463, Actor Loss: -824.5011329650879
Episode 2683: Time: 0.2580270767211914, Total Reward: 266.5767042064093, Q Loss: 2461.860538482666, Actor Loss: -2295.0047302246094
Episode 2684: Time: 0.17173409461975098, Total Reward: 173.28899567816487, Q Loss: 1691.517677307129, Actor Loss: -1429.4421768188477
Episode 2685: Time: 0.2757863998413086, Total Reward: 285.62637457523425, Q Loss: 2994.7423667907715, Actor Loss: -2416.803005218506
Episode 2686: Time: 0.12978267669677734, Total Reward: 127.3326296438549, Q Loss: 1278.1276397705078, Actor Loss: -1144.3538818359375
Episode 2687: Time: 0.2845306396484375, Total Reward: 293.7074998950693, Q Loss: 2593.2396354675293, Actor Loss: -2447.496894836426
Episode 2688: Time: 0.07794690132141113, Total Reward: 72.68221637238344, Q Loss: 790.015682220459, Actor Loss: -650.3816375732422
Episode 2689: Time: 0.19827818870544434, Total Reward: 200.37489680449676, Q Loss: 1947.3088493347168, Actor Loss: -1739.6251068115234

Episode 2690: Time: 0.07780075073242188, Total Reward: 72.9536215608449, Q Loss: 822.0561256408691, Actor Loss: -711.6636428833008
Episode 2691: Time: 0.13806605339050293, Total Reward: 137.51959348794045, Q Loss: 1402.0251426696777, Actor Loss: -1219.424057006836
Episode 2692: Time: 0.10365796089172363, Total Reward: 100.22569424251394, Q Loss: 1064.188175201416, Actor Loss: -929.8042068481445
Episode 2693: Time: 0.11247682571411133, Total Reward: 108.53814784726566, Q Loss: 1059.6831703186035, Actor Loss: -1019.4108810424805
Episode 2694: Time: 0.11212730407714844, Total Reward: 110.00394128461544, Q Loss: 1257.0791625976562, Actor Loss: -1008.1869735717773
Episode 2695: Time: 0.19892668724060059, Total Reward: 202.8388986161995, Q Loss: 1965.9169578552246, Actor Loss: -1689.4630546569824
Episode 2696: Time: 0.13800263404846191, Total Reward: 137.4470986889133, Q Loss: 1454.3646850585938, Actor Loss: -1239.2523727416992
Episode 2697: Time: 0.18214869499206543, Total Reward: 181.21690199905427, Q Loss: 1858.2002487182617, Actor Loss: -1561.6203231811523
Episode 2698: Time: 0.0692605972290039, Total Reward: 61.20517901887527, Q Loss: 667.8744506835938, Actor Loss: -593.9727973937988
Episode 2699: Time: 0.294003963470459, Total Reward: 304.09583220020534, Q Loss: 2794.4013023376465, Actor Loss: -2494.503974914551
Validation Mean: 350.12258672342216, Validation Std: 128.06775447921086
saving model
Episode 2700: Time: 0.1046593189239502, Total Reward: 100.80555865941662, Q Loss: 991.7430801391602, Actor Loss: -906.795352935791
Episode 2701: Time: 0.06941604614257812, Total Reward: 62.823124580084574, Q Loss: 768.6212768554688, Actor Loss: -608.7275390625
Episode 2702: Time: 0.16455745697021484, Total Reward: 164.42253431667478, Q Loss: 1986.099464416504, Actor Loss: -1460.036491394043
Episode 2703: Time: 0.1382770538330078, Total Reward: 135.72206591465041, Q Loss: 1468.3086471557617, Actor Loss: -1242.7299728393555
Episode 2704: Time: 0.15594244003295898, Total Reward: 155.0824946942566, Q Loss: 1390.5907707214355, Actor Loss: -1388.3789978027344
Episode 2705: Time: 0.15551185607910156, Total Reward: 156.8431172053534, Q Loss: 1440.1170387268066, Actor Loss: -1324.1545600891113
Episode 2706: Time: 0.23320746421813965, Total Reward: 239.3059127955233, Q Loss: 2159.101978302002, Actor Loss: -2057.3540420532227
Episode 2707: Time: 0.24245500564575195, Total Reward: 248.81195454601297, Q Loss: 2439.6334381103516, Actor Loss: -2120.714286804199
Episode 2708: Time: 0.07809710502624512, Total Reward: 72.55788953581302, Q Loss: 792.3059158325195, Actor Loss: -704.7828979492188
Episode 2709: Time: 0.2160336971282959, Total Reward: 220.80994535662467, Q Loss: 2423.5942344665527, Actor Loss: -1868.1587448120117
Episode 2710: Time: 0.4155552387237549, Total Reward: 431.8012060196644, Q Loss: 4187.357288360596, Actor Loss: -3660.4360733032227
Episode 2711: Time: 0.1557457447052002, Total Reward: 155.72474388509227, Q Loss: 1490.4337272644043, Actor Loss: -1356.5899353027344
Episode 2712: Time: 0.21652460098266602, Total Reward: 218.58268195220023, Q Loss: 2353.013370513916, Actor Loss: -1947.6476936340332
Episode 2713: Time: 0.07844161987304688, Total Reward: 72.3837597327496, Q Loss: 825.548397064209, Actor Loss: -708.4157409667969
Episode 2714: Time: 0.06954240798950195, Total Reward: 62.83979845124641, Q Loss: 772.7951469421387, Actor Loss: -651.3652420043945
Episode 2715: Time: 0.1216435432434082, Total Reward: 118.6729450044802, Q Loss: 1260.9708709716797, Actor Loss: -1091.7537460327148
Episode 2716: Time: 0.2599639892578125, Total Reward: 266.85476038801676, Q Loss: 2666.6631622314453, Actor Loss: -2242.7182426452637

Episode 2717: Time: 0.1817171573638916, Total Reward: 184.19476144347675, Q Loss: 2163.236946105957, Actor Loss: -1688.8269729614258
Episode 2718: Time: 0.23385095596313477, Total Reward: 239.46484217171988, Q Loss: 2932.254135131836, Actor Loss: -2042.583236694336
Episode 2719: Time: 0.16384172439575195, Total Reward: 165.2035117913462, Q Loss: 1831.265422821045, Actor Loss: -1542.937240600586
Episode 2720: Time: 0.12143397331237793, Total Reward: 119.1895097020512, Q Loss: 1207.7605056762695, Actor Loss: -1076.8422241210938
Episode 2721: Time: 0.16359901428222656, Total Reward: 165.31965738454758, Q Loss: 1613.3924560546875, Actor Loss: -1439.9258575439453
Episode 2722: Time: 0.07802462577819824, Total Reward: 72.8935279703432, Q Loss: 761.3029479980469, Actor Loss: -678.8302917480469
Episode 2723: Time: 0.21499037742614746, Total Reward: 220.5489996387758, Q Loss: 2396.5012588500977, Actor Loss: -2019.9068984985352
Episode 2724: Time: 0.266556978225708, Total Reward: 277.34651629979084, Q Loss: 2821.360210418701, Actor Loss: -2404.628200531006
Episode 2725: Time: 0.19727659225463867, Total Reward: 202.3969989096461, Q Loss: 2078.5567932128906, Actor Loss: -1815.9918823242188
Episode 2726: Time: 0.13829565048217773, Total Reward: 137.23087545455635, Q Loss: 1568.1287536621094, Actor Loss: -1278.9664001464844
Episode 2727: Time: 0.1889491081237793, Total Reward: 192.44389736977928, Q Loss: 1924.4774551391602, Actor Loss: -1736.5815124511719
Episode 2728: Time: 0.1636180877685547, Total Reward: 165.70349565447518, Q Loss: 1700.2014122009277, Actor Loss: -1479.5079727172852
Episode 2729: Time: 0.258129358291626, Total Reward: 267.14150534002573, Q Loss: 2895.710205078125, Actor Loss: -2393.211067199707
Episode 2730: Time: 0.10339117050170898, Total Reward: 100.07535432413096, Q Loss: 1030.7844161987305, Actor Loss: -960.3990783691406
Episode 2731: Time: 0.24096035957336426, Total Reward: 249.39802718083766, Q Loss: 2551.0459365844727, Actor Loss: -2159.4505462646484
Episode 2732: Time: 0.14641284942626953, Total Reward: 146.65411793043458, Q Loss: 1675.0835876464844, Actor Loss: -1364.341163635254
Episode 2733: Time: 0.1635913848876953, Total Reward: 165.03072437269248, Q Loss: 1785.9294548034668, Actor Loss: -1501.8341827392578
Episode 2734: Time: 0.13785791397094727, Total Reward: 137.86574555828375, Q Loss: 1496.1754112243652, Actor Loss: -1260.2044143676758
Episode 2735: Time: 0.18164610862731934, Total Reward: 183.2646919226552, Q Loss: 1892.6035423278809, Actor Loss: -1737.0230407714844
Episode 2736: Time: 0.2670104503631592, Total Reward: 275.44375542554155, Q Loss: 3225.9516105651855, Actor Loss: -2450.882987976074
Episode 2737: Time: 0.22431373596191406, Total Reward: 230.67952906964527, Q Loss: 2428.705062866211, Actor Loss: -2029.4643478393555
Episode 2738: Time: 0.13962960243225098, Total Reward: 137.52176496856444, Q Loss: 1692.6755447387695, Actor Loss: -1275.125747680664
Episode 2739: Time: 0.1656966209411621, Total Reward: 165.3563590072731, Q Loss: 2007.197509765625, Actor Loss: -1512.9766998291016
Episode 2740: Time: 0.12988924980163574, Total Reward: 128.25097178625353, Q Loss: 1538.571662902832, Actor Loss: -1173.5004272460938
Episode 2741: Time: 0.11284637451171875, Total Reward: 109.76742916594114, Q Loss: 1107.9032745361328, Actor Loss: -1006.4561767578125
Episode 2742: Time: 0.12117981910705566, Total Reward: 119.31985378609323, Q Loss: 1317.4919662475586, Actor Loss: -1120.2267227172852
Episode 2743: Time: 0.34877514839172363, Total Reward: 342.50534128244965, Q Loss: 3816.798999786377, Actor Loss: -3001.7266006469727
Episode 2744: Time: 0.3836526870727539, Total Reward: 396.6468731993445, Q Loss: 4137.558216094971, Actor Loss: -3414.52099609375

Episode 2745: Time: 0.17835068702697754, Total Reward: 174.74258013195887, Q Loss: 1785.2717170715332, Actor Loss: -1590.685302734375
Episode 2746: Time: 0.07836556434631348, Total Reward: 72.52785198870977, Q Loss: 1015.2675437927246, Actor Loss: -710.738395690918
Episode 2747: Time: 0.18961095809936523, Total Reward: 193.42553091798047, Q Loss: 2175.324607849121, Actor Loss: -1815.4609146118164
Episode 2748: Time: 0.0783231258392334, Total Reward: 72.05834758272317, Q Loss: 768.8178443908691, Actor Loss: -718.4404296875
Episode 2749: Time: 0.20735812187194824, Total Reward: 212.43264726923306, Q Loss: 2435.501720428467, Actor Loss: -1927.1265106201172
Episode 2750: Time: 0.2849280834197998, Total Reward: 295.00887869242274, Q Loss: 3295.090129852295, Actor Loss: -2685.0787200927734
Episode 2751: Time: 0.13856005668640137, Total Reward: 137.74918069846547, Q Loss: 1526.2289390563965, Actor Loss: -1310.421287536621
Episode 2752: Time: 0.198807954788208, Total Reward: 202.49554521920282, Q Loss: 2260.9297065734863, Actor Loss: -1861.0915489196777
Episode 2753: Time: 0.2853128910064697, Total Reward: 295.7804329849462, Q Loss: 2978.102752685547, Actor Loss: -2637.2633743286133
Episode 2754: Time: 0.2172837257385254, Total Reward: 220.36353577956922, Q Loss: 2535.285789489746, Actor Loss: -2054.225730895996
Episode 2755: Time: 0.4736018180847168, Total Reward: 500.74157936773, Q Loss: 5780.358825683594, Actor Loss: -4489.212242126465
Episode 2756: Time: 0.1216273307800293, Total Reward: 118.22865475097096, Q Loss: 1515.989013671875, Actor Loss: -1126.2692756652832
Episode 2757: Time: 0.25856637954711914, Total Reward: 268.4948181622449, Q Loss: 2594.2683906555176, Actor Loss: -2370.3743743896484
Episode 2758: Time: 0.15520739555358887, Total Reward: 155.97795979601003, Q Loss: 1856.9863204956055, Actor Loss: -1477.735336303711
Episode 2759: Time: 0.24184632301330566, Total Reward: 248.82120897450852, Q Loss: 3047.5781478881836, Actor Loss: -2284.3244705200195
Episode 2760: Time: 0.31877756118774414, Total Reward: 333.1158873630497, Q Loss: 4002.958354949951, Actor Loss: -3028.380813598633
Episode 2761: Time: 0.32787084579467773, Total Reward: 341.59026988761565, Q Loss: 3537.761993408203, Actor Loss: -3152.613410949707
Episode 2762: Time: 0.1721034049987793, Total Reward: 174.82629213857533, Q Loss: 1964.8355102539062, Actor Loss: -1647.6818084716797
Episode 2763: Time: 0.2845180034637451, Total Reward: 295.6649349670853, Q Loss: 3385.9698371887207, Actor Loss: -2711.651752471924
Episode 2764: Time: 0.24110960960388184, Total Reward: 249.65518892751348, Q Loss: 2922.4792251586914, Actor Loss: -2334.769821166992
Episode 2765: Time: 0.06897282600402832, Total Reward: 62.68622040017299, Q Loss: 701.6532936096191, Actor Loss: -639.1218032836914
Episode 2766: Time: 0.2501974105834961, Total Reward: 258.29328221003163, Q Loss: 2845.043472290039, Actor Loss: -2365.8805923461914
Episode 2767: Time: 0.21530747413635254, Total Reward: 220.08113165102802, Q Loss: 2633.828414916992, Actor Loss: -2025.4011840820312
Episode 2768: Time: 0.16352152824401855, Total Reward: 165.30705590396946, Q Loss: 1832.616786956787, Actor Loss: -1602.3426895141602
Episode 2769: Time: 0.19792866706848145, Total Reward: 201.59190876581107, Q Loss: 2399.8759155273438, Actor Loss: -1848.8226852416992
Episode 2770: Time: 0.22396397590637207, Total Reward: 229.67061880790686, Q Loss: 2453.407741546631, Actor Loss: -2145.6980514526367
Episode 2771: Time: 0.27521657943725586, Total Reward: 286.380794287547, Q Loss: 3196.887409210205, Actor Loss: -2631.225570678711
Episode 2772: Time: 0.13763833045959473, Total Reward: 137.76457881007357, Q Loss: 1649.7218132019043, Actor Loss: -1317.5376815795898

Episode 2773: Time: 0.180861234664917, Total Reward: 184.71737145816917, Q Loss: 2103.853214263916, Actor Loss: -1693.5795288085938
Episode 2774: Time: 0.23447656631469727, Total Reward: 239.770790747715, Q Loss: 2962.219295501709, Actor Loss: -2261.8120193481445
Episode 2775: Time: 0.3048264980316162, Total Reward: 314.83541452378785, Q Loss: 4026.828727722168, Actor Loss: -2906.969528198242
Episode 2776: Time: 0.11417055130004883, Total Reward: 109.94993184709287, Q Loss: 1265.4020690917969, Actor Loss: -1087.5402069091797
Episode 2777: Time: 0.1563112735748291, Total Reward: 156.3166117650812, Q Loss: 1720.7493934631348, Actor Loss: -1552.0980834960938
Episode 2778: Time: 0.26076579093933105, Total Reward: 266.558994540915, Q Loss: 3150.279983520508, Actor Loss: -2538.250762939453
Episode 2779: Time: 0.27701497077941895, Total Reward: 285.42609670957796, Q Loss: 3288.8876419067383, Actor Loss: -2731.0972213745117
Episode 2780: Time: 0.19921016693115234, Total Reward: 203.25604789428854, Q Loss: 2639.3680877685547, Actor Loss: -1922.2604675292969
Episode 2781: Time: 0.3553290367126465, Total Reward: 368.62666780212913, Q Loss: 4244.591548919678, Actor Loss: -3373.333625793457
Episode 2782: Time: 0.11246228218078613, Total Reward: 110.10970136775069, Q Loss: 1486.94140625, Actor Loss: -1119.3792419433594
Episode 2783: Time: 0.11307024955749512, Total Reward: 110.48950800888987, Q Loss: 1748.0826950073242, Actor Loss: -1104.6399002075195
Episode 2784: Time: 0.27891087532043457, Total Reward: 286.4776153995163, Q Loss: 3551.6581954956055, Actor Loss: -2748.979461669922
Episode 2785: Time: 0.08630752563476562, Total Reward: 81.98354888452205, Q Loss: 1097.7963638305664, Actor Loss: -838.5445709228516
Episode 2786: Time: 0.27820849418640137, Total Reward: 284.9868253310694, Q Loss: 3554.599895477295, Actor Loss: -2723.0014572143555
Episode 2787: Time: 0.20794963836669922, Total Reward: 212.63290307070795, Q Loss: 2651.81339263916, Actor Loss: -2068.6689453125
Episode 2788: Time: 0.1476733684539795, Total Reward: 146.38317460386668, Q Loss: 1917.9623489379883, Actor Loss: -1404.9912338256836
Episode 2789: Time: 0.08646559715270996, Total Reward: 82.4267102355835, Q Loss: 1059.391830444336, Actor Loss: -845.779899597168
Episode 2790: Time: 0.17310285568237305, Total Reward: 174.2291127322079, Q Loss: 2036.6497535705566, Actor Loss: -1672.5429344177246
Episode 2791: Time: 0.18247127532958984, Total Reward: 182.92580050961405, Q Loss: 2286.1113052368164, Actor Loss: -1798.6409301757812
Episode 2792: Time: 0.2511165142059326, Total Reward: 259.09597431018557, Q Loss: 3008.706123352051, Actor Loss: -2481.360565185547
Episode 2793: Time: 0.13899779319763184, Total Reward: 137.91591282165155, Q Loss: 1570.3020782470703, Actor Loss: -1394.2987060546875
Episode 2794: Time: 0.15602350234985352, Total Reward: 155.7924243572326, Q Loss: 2092.3286743164062, Actor Loss: -1520.8894653320312
Episode 2795: Time: 0.2605464458465576, Total Reward: 268.4852432731694, Q Loss: 3361.9306411743164, Actor Loss: -2604.308753967285
Episode 2796: Time: 0.1384294033050537, Total Reward: 137.88914888098557, Q Loss: 1834.36376953125, Actor Loss: -1381.155632019043
Episode 2797: Time: 0.2613060474395752, Total Reward: 269.24079356885835, Q Loss: 3591.0617904663086, Actor Loss: -2564.3642807006836
Episode 2798: Time: 0.15613341331481934, Total Reward: 156.82458085196714, Q Loss: 2059.8759536743164, Actor Loss: -1585.4793167114258
Episode 2799: Time: 0.21765470504760742, Total Reward: 221.51117108838494, Q Loss: 2838.6034965515137, Actor Loss: -2131.39013671875
Validation Mean: 299.4362978363312, Validation Std: 88.38604528902388
saving model

Episode 2800: Time: 0.16468310356140137, Total Reward: 166.0329071235196, Q Loss: 2191.498104095459, Actor Loss: -1649.632339477539
Episode 2801: Time: 0.11306071281433105, Total Reward: 109.94809641890036, Q Loss: 1170.8000564575195, Actor Loss: -1118.0262603759766
Episode 2802: Time: 0.09521484375, Total Reward: 90.8805559108032, Q Loss: 1166.3439559936523, Actor Loss: -951.7236709594727
Episode 2803: Time: 0.10411262512207031, Total Reward: 100.7261277962839, Q Loss: 1585.9184112548828, Actor Loss: -1062.2903594970703
Episode 2804: Time: 0.13962292671203613, Total Reward: 138.1427035901437, Q Loss: 1896.602035522461, Actor Loss: -1356.7993545532227
Episode 2805: Time: 0.13849759101867676, Total Reward: 137.70991541322044, Q Loss: 1826.210060119629, Actor Loss: -1368.8161315917969
Episode 2806: Time: 0.3373703956604004, Total Reward: 352.04663417473154, Q Loss: 4387.608985900879, Actor Loss: -3408.1058959960938
Episode 2807: Time: 0.23313355445861816, Total Reward: 240.93511274928738, Q Loss: 3122.8276596069336, Actor Loss: -2285.6894149780273
Episode 2808: Time: 0.10329437255859375, Total Reward: 100.86926862877685, Q Loss: 1382.077262878418, Actor Loss: -1047.5093231201172
Episode 2809: Time: 0.2494831085205078, Total Reward: 257.63534813711357, Q Loss: 3437.0784301757812, Actor Loss: -2513.4091720581055
Episode 2810: Time: 0.33466458320617676, Total Reward: 352.61772345987737, Q Loss: 4230.3686447143555, Actor Loss: -3292.7092056274414
Episode 2811: Time: 0.1544201374053955, Total Reward: 155.75542494338944, Q Loss: 2051.3459396362305, Actor Loss: -1559.1430892944336
Episode 2812: Time: 0.21442222595214844, Total Reward: 221.79842022970428, Q Loss: 2948.612075805664, Actor Loss: -2162.2658767700195
Episode 2813: Time: 0.40497636795043945, Total Reward: 426.78960146932957, Q Loss: 5566.603839874268, Actor Loss: -4115.4376220703125
Episode 2814: Time: 0.18120050430297852, Total Reward: 184.6949904274475, Q Loss: 2801.3948287963867, Actor Loss: -1894.497413635254
Episode 2815: Time: 0.25873231887817383, Total Reward: 265.7542006700994, Q Loss: 3256.6275634765625, Actor Loss: -2674.739288330078
Episode 2816: Time: 0.0948343276977539, Total Reward: 91.01280740063764, Q Loss: 1208.4724044799805, Actor Loss: -949.2599868774414
Episode 2817: Time: 0.18986821174621582, Total Reward: 193.49374094479117, Q Loss: 2432.1077575683594, Actor Loss: -1929.488265991211
Episode 2818: Time: 0.37857508659362793, Total Reward: 399.23342051460764, Q Loss: 5172.891399383545, Actor Loss: -3899.7455825805664
Episode 2819: Time: 0.26748204231262207, Total Reward: 277.0761023926329, Q Loss: 3411.773124694824, Actor Loss: -2706.04248046875
Episode 2820: Time: 0.3517589569091797, Total Reward: 369.9472198565502, Q Loss: 4940.6394119262695, Actor Loss: -3622.0794982910156
Episode 2821: Time: 0.23344635963439941, Total Reward: 239.51150092827706, Q Loss: 3058.8061141967773, Actor Loss: -2402.901336669922
Episode 2822: Time: 0.1635444164276123, Total Reward: 165.99119327037158, Q Loss: 1934.7798614501953, Actor Loss: -1698.8411865234375
Episode 2823: Time: 0.16415619850158691, Total Reward: 166.1043665289837, Q Loss: 2457.1533737182617, Actor Loss: -1743.4445724487305
Episode 2824: Time: 0.08640623092651367, Total Reward: 81.90228368124976, Q Loss: 1004.5900382995605, Actor Loss: -850.2192840576172
Episode 2825: Time: 0.20721173286437988, Total Reward: 212.04381978391916, Q Loss: 2746.2498168945312, Actor Loss: -2170.80997467041
Episode 2826: Time: 0.2581014633178711, Total Reward: 266.55127052224464, Q Loss: 3471.587387084961, Actor Loss: -2691.953582763672
Episode 2827: Time: 0.22340798377990723, Total Reward: 230.21224424970913, Q Loss: 2983.6421432495117, Actor Loss: -2325.1403198242188

Episode 2828: Time: 0.23192167282104492, Total Reward: 239.92772556651477, Q Loss: 3252.2837142944336, Actor Loss: -2359.8003005981445
Episode 2829: Time: 0.2496037483215332, Total Reward: 256.8146132743168, Q Loss: 3510.5585746765137, Actor Loss: -2556.5233459472656
Episode 2830: Time: 0.1377718448638916, Total Reward: 137.9287334795747, Q Loss: 1893.0953979492188, Actor Loss: -1429.4823455810547
Episode 2831: Time: 0.31071972846984863, Total Reward: 323.5941133135642, Q Loss: 4333.952533721924, Actor Loss: -3180.0060958862305
Episode 2832: Time: 0.24991703033447266, Total Reward: 258.90655263519255, Q Loss: 3720.564552307129, Actor Loss: -2631.5035705566406
Episode 2833: Time: 0.1551826000213623, Total Reward: 156.76991497867917, Q Loss: 2096.1155395507812, Actor Loss: -1607.3291320800781
Episode 2834: Time: 0.23313617706298828, Total Reward: 240.49067330707757, Q Loss: 3272.1691818237305, Actor Loss: -2464.6777954101562
Episode 2835: Time: 0.09497570991516113, Total Reward: 91.56993361341779, Q Loss: 1415.897071838379, Actor Loss: -971.034423828125
Episode 2836: Time: 0.3016955852508545, Total Reward: 315.2263108924911, Q Loss: 3955.7692337036133, Actor Loss: -3113.1350021362305
Episode 2837: Time: 0.17439985275268555, Total Reward: 175.43555810887898, Q Loss: 2304.135543823242, Actor Loss: -1824.1908340454102
Episode 2838: Time: 0.2215723991394043, Total Reward: 220.58658132646235, Q Loss: 2649.689220428467, Actor Loss: -2264.653030395508
Episode 2839: Time: 0.25002336502075195, Total Reward: 258.8787174386155, Q Loss: 4001.6073570251465, Actor Loss: -2543.2955169677734
Episode 2840: Time: 0.2873368263244629, Total Reward: 296.4527581185319, Q Loss: 3922.7887001037598, Actor Loss: -2979.9092559814453
Episode 2841: Time: 0.26990818977355957, Total Reward: 277.69574359507914, Q Loss: 3854.243305206299, Actor Loss: -2721.3740310668945
Episode 2842: Time: 0.18271660804748535, Total Reward: 184.4929527676326, Q Loss: 2612.289596557617, Actor Loss: -1931.7592391967773
Episode 2843: Time: 0.234375, Total Reward: 240.2021589545566, Q Loss: 3099.0251083374023, Actor Loss: -2409.7383193969727
Episode 2844: Time: 0.19125628471374512, Total Reward: 192.15741612768377, Q Loss: 2491.2666778564453, Actor Loss: -2054.622718811035
Episode 2845: Time: 0.11334633827209473, Total Reward: 110.10146550838078, Q Loss: 1583.279312133789, Actor Loss: -1186.9150009155273
Episode 2846: Time: 0.2179098129272461, Total Reward: 221.909373582176, Q Loss: 3119.693183898926, Actor Loss: -2292.8178787231445
Episode 2847: Time: 0.19157648086547852, Total Reward: 193.23685953899053, Q Loss: 2693.549026489258, Actor Loss: -2041.9707794189453
Episode 2848: Time: 0.1916360855102539, Total Reward: 194.4919048894717, Q Loss: 2561.33837890625, Actor Loss: -1991.19287109375
Episode 2849: Time: 0.17311382293701172, Total Reward: 175.07197661533507, Q Loss: 2354.0022888183594, Actor Loss: -1892.3125762939453
Episode 2850: Time: 0.4000430107116699, Total Reward: 417.4239355874185, Q Loss: 5367.685119628906, Actor Loss: -4107.76985168457
Episode 2851: Time: 0.20867633819580078, Total Reward: 212.45752362541663, Q Loss: 3205.8088912963867, Actor Loss: -2186.4233932495117
Episode 2852: Time: 0.13168716430664062, Total Reward: 128.88953103129663, Q Loss: 1817.5068359375, Actor Loss: -1381.2793579101562
Episode 2853: Time: 0.18253350257873535, Total Reward: 184.92913588642026, Q Loss: 2818.263816833496, Actor Loss: -1941.8100204467773
Episode 2854: Time: 0.25269389152526855, Total Reward: 257.19166069102846, Q Loss: 3439.9074325561523, Actor Loss: -2709.404930114746
Episode 2855: Time: 0.23445653915405273, Total Reward: 239.72012436567897, Q Loss: 3024.5218505859375, Actor Loss: -2446.4241943359375

Episode 2856: Time: 0.2342979907989502, Total Reward: 240.347326541589, Q Loss: 3314.9482650756836, Actor Loss: -2478.1508865356445
Episode 2857: Time: 0.1393446922302246, Total Reward: 137.90045550204962, Q Loss: 2101.9207344055176, Actor Loss: -1503.456916809082
Episode 2858: Time: 0.3211526870727539, Total Reward: 332.09589871956393, Q Loss: 4580.371410369873, Actor Loss: -3381.7001571655273
Episode 2859: Time: 0.08755755424499512, Total Reward: 82.2509883218201, Q Loss: 1116.0956993103027, Actor Loss: -950.0950546264648
Episode 2860: Time: 0.10460853576660156, Total Reward: 101.09599124554727, Q Loss: 1537.6758193969727, Actor Loss: -1145.3026428222656
Episode 2861: Time: 0.22563958168029785, Total Reward: 230.81789620800464, Q Loss: 3230.8017082214355, Actor Loss: -2385.662872314453
Episode 2862: Time: 0.13004755973815918, Total Reward: 128.93168909793746, Q Loss: 1978.3274154663086, Actor Loss: -1420.3304595947266
Episode 2863: Time: 0.19128990173339844, Total Reward: 193.75712011658865, Q Loss: 2734.547996520996, Actor Loss: -2083.027069091797
Episode 2864: Time: 0.21732783317565918, Total Reward: 221.6984723485057, Q Loss: 3353.260772705078, Actor Loss: -2331.186683654785
Episode 2865: Time: 0.13010072708129883, Total Reward: 128.08748908854318, Q Loss: 1619.146728515625, Actor Loss: -1382.589973449707
Episode 2866: Time: 0.18284153938293457, Total Reward: 184.85297884947454, Q Loss: 2916.3956298828125, Actor Loss: -2049.8040466308594
Episode 2867: Time: 0.13949298858642578, Total Reward: 137.67542353743465, Q Loss: 1931.574649810791, Actor Loss: -1429.1503601074219
Episode 2868: Time: 0.44530797004699707, Total Reward: 435.39777997031297, Q Loss: 6276.877487182617, Actor Loss: -4504.687355041504
Episode 2869: Time: 0.6196210384368896, Total Reward: 658.4460442063252, Q Loss: 9537.999210357666, Actor Loss: -6777.5108642578125
Episode 2870: Time: 0.30933117866516113, Total Reward: 322.21926208212244, Q Loss: 4803.160793304443, Actor Loss: -3351.951156616211
Episode 2871: Time: 0.1201324462890625, Total Reward: 119.05975483706713, Q Loss: 1939.74609375, Actor Loss: -1321.5288925170898
Episode 2872: Time: 0.08649253845214844, Total Reward: 82.17394217944388, Q Loss: 1352.4925384521484, Actor Loss: -905.0753860473633
Episode 2873: Time: 0.12032675743103027, Total Reward: 119.36125054978017, Q Loss: 1547.9230651855469, Actor Loss: -1316.1333465576172
Episode 2874: Time: 0.21509933471679688, Total Reward: 221.03552814467122, Q Loss: 3169.9905700683594, Actor Loss: -2356.4387283325195
Episode 2875: Time: 0.35210633277893066, Total Reward: 370.50204570343095, Q Loss: 5336.109115600586, Actor Loss: -3942.655471801758
Episode 2876: Time: 0.1905519962310791, Total Reward: 191.75085673716526, Q Loss: 2774.8442459106445, Actor Loss: -2032.5831680297852
Episode 2877: Time: 0.23355603218078613, Total Reward: 240.43001243467228, Q Loss: 3240.1417121887207, Actor Loss: -2460.136787414551
Episode 2878: Time: 0.207322359085083, Total Reward: 212.35357705603406, Q Loss: 3142.272994995117, Actor Loss: -2304.415298461914
Episode 2879: Time: 0.24997997283935547, Total Reward: 256.27560844226895, Q Loss: 3810.228904724121, Actor Loss: -2626.5352325439453
Episode 2880: Time: 0.1975996494293213, Total Reward: 203.14134915125283, Q Loss: 3028.550636291504, Actor Loss: -2170.0040130615234
Episode 2881: Time: 0.18994951248168945, Total Reward: 193.97023056078606, Q Loss: 2754.4870223999023, Actor Loss: -2029.5418243408203
Episode 2882: Time: 0.21682429313659668, Total Reward: 221.76963138425046, Q Loss: 3238.3838386535645, Actor Loss: -2391.7328491210938
Episode 2883: Time: 0.24187231063842773, Total Reward: 249.95147390396056, Q Loss: 3246.0040321350098, Actor Loss: -2567.308921813965

Episode 2884: Time: 0.1978321075439453, Total Reward: 203.14974769760386, Q Loss: 3034.347427368164, Actor Loss: -2216.262985229492
Episode 2885: Time: 0.21520233154296875, Total Reward: 221.1710618119582, Q Loss: 3330.1513061523438, Actor Loss: -2378.3032760620117
Episode 2886: Time: 0.5858364105224609, Total Reward: 623.7095771074233, Q Loss: 8889.035934448242, Actor Loss: -6550.585639953613
Episode 2887: Time: 0.10438966751098633, Total Reward: 100.79508478153991, Q Loss: 1623.7419738769531, Actor Loss: -1147.048194885254
Episode 2888: Time: 0.25867128372192383, Total Reward: 267.7074510012855, Q Loss: 3739.11527633667, Actor Loss: -2823.221519470215
Episode 2889: Time: 0.15471506118774414, Total Reward: 156.59052753598053, Q Loss: 2245.515354156494, Actor Loss: -1752.9002838134766
Episode 2890: Time: 0.07816362380981445, Total Reward: 72.57679581887061, Q Loss: 1101.141616821289, Actor Loss: -843.0130844116211
Episode 2891: Time: 0.22555208206176758, Total Reward: 229.4414310554816, Q Loss: 3250.398262023926, Actor Loss: -2567.2046661376953
Episode 2892: Time: 0.14668560028076172, Total Reward: 147.56831841310665, Q Loss: 2271.1473388671875, Actor Loss: -1637.863784790039
Episode 2893: Time: 0.12195825576782227, Total Reward: 120.04513527880678, Q Loss: 1800.5505905151367, Actor Loss: -1356.1184844970703
Episode 2894: Time: 0.17362117767333984, Total Reward: 175.3193646658784, Q Loss: 3031.559371948242, Actor Loss: -2007.678611755371
Episode 2895: Time: 0.19121193885803223, Total Reward: 193.00889709604888, Q Loss: 2759.7255630493164, Actor Loss: -2142.490852355957
Episode 2896: Time: 0.22551441192626953, Total Reward: 230.16561432605226, Q Loss: 3685.888359069824, Actor Loss: -2538.6049423217773
Episode 2897: Time: 0.20288348197937012, Total Reward: 203.01791474107893, Q Loss: 3425.7060775756836, Actor Loss: -2228.3847885131836
Episode 2898: Time: 0.09572958946228027, Total Reward: 91.32375702797361, Q Loss: 1577.5989074707031, Actor Loss: -1027.8642959594727
Episode 2899: Time: 0.20964956283569336, Total Reward: 208.90138936407297, Q Loss: 3229.2662086486816, Actor Loss: -2366.5563354492188
Validation Mean: 327.4421295338623, Validation Std: 88.3347514663722
saving model
Episode 2900: Time: 0.2704916000366211, Total Reward: 277.7035674829607, Q Loss: 4365.819358825684, Actor Loss: -2937.9695739746094
Episode 2901: Time: 0.16471481323242188, Total Reward: 164.84723668614325, Q Loss: 2492.33065032959, Actor Loss: -1835.406494140625
Episode 2902: Time: 0.17424702644348145, Total Reward: 175.5772950605094, Q Loss: 2911.5598373413086, Actor Loss: -1946.6591796875
Episode 2903: Time: 0.21667885780334473, Total Reward: 221.92962422573, Q Loss: 3638.0820846557617, Actor Loss: -2425.007743835449
Episode 2904: Time: 0.3036470413208008, Total Reward: 314.8852406522345, Q Loss: 4785.541126251221, Actor Loss: -3419.64005279541
Episode 2905: Time: 0.20881104469299316, Total Reward: 212.21912927622276, Q Loss: 3617.5063705444336, Actor Loss: -2354.287139892578
Episode 2906: Time: 0.2775757312774658, Total Reward: 286.724085132446, Q Loss: 4390.529090881348, Actor Loss: -3170.294952392578
Episode 2907: Time: 0.07884097099304199, Total Reward: 72.37517464035747, Q Loss: 1194.903060913086, Actor Loss: -883.9044723510742
Episode 2908: Time: 0.30327343940734863, Total Reward: 313.3123922285423, Q Loss: 4867.700538635254, Actor Loss: -3464.5186920166016
Episode 2909: Time: 0.250929594039917, Total Reward: 259.049532190684, Q Loss: 4270.9924392700195, Actor Loss: -2858.5803756713867
Episode 2910: Time: 0.17330551147460938, Total Reward: 175.6877051784208, Q Loss: 3012.3779525756836, Actor Loss: -1947.0297775268555

Episode 2911: Time: 0.12216687202453613, Total Reward: 119.26318535744792, Q Loss: 1778.0371932983398, Actor Loss: -1427.8639068603516
Episode 2912: Time: 0.13016009330749512, Total Reward: 128.72292190141184, Q Loss: 1939.2405166625977, Actor Loss: -1466.4432220458984
Episode 2913: Time: 0.2945396900177002, Total Reward: 306.14337182075417, Q Loss: 4821.120506286621, Actor Loss: -3454.43643951416
Episode 2914: Time: 0.21690082550048828, Total Reward: 221.64168243670997, Q Loss: 3456.6358642578125, Actor Loss: -2471.5921325683594
Episode 2915: Time: 0.23435425758361816, Total Reward: 240.8266605905667, Q Loss: 3770.519012451172, Actor Loss: -2645.3417892456055
Episode 2916: Time: 0.25086021423339844, Total Reward: 259.4898272125998, Q Loss: 4135.837608337402, Actor Loss: -2935.436279296875
Episode 2917: Time: 0.27742743492126465, Total Reward: 286.7446156242209, Q Loss: 4414.38224029541, Actor Loss: -3123.215850830078
Episode 2918: Time: 0.3442530632019043, Total Reward: 360.8195444509209, Q Loss: 5595.614860534668, Actor Loss: -4083.682083129883
Episode 2919: Time: 0.20682430267333984, Total Reward: 212.7657437670038, Q Loss: 3301.5175704956055, Actor Loss: -2414.530158996582
Episode 2920: Time: 0.24127793312072754, Total Reward: 249.78935916203477, Q Loss: 3752.3852157592773, Actor Loss: -2798.1660919189453
Episode 2921: Time: 0.27556777000427246, Total Reward: 286.4474734086508, Q Loss: 4888.405059814453, Actor Loss: -3132.747817993164
Episode 2922: Time: 0.19808602333068848, Total Reward: 202.88640865857482, Q Loss: 3224.7539443969727, Actor Loss: -2248.939254760742
Episode 2923: Time: 0.19792795181274414, Total Reward: 202.96713245308095, Q Loss: 3373.6361770629883, Actor Loss: -2395.092384338379
Episode 2924: Time: 0.3010070323944092, Total Reward: 314.26512347529905, Q Loss: 5342.18196105957, Actor Loss: -3435.3926544189453
Episode 2925: Time: 0.2661442756652832, Total Reward: 276.1695329899866, Q Loss: 4249.664260864258, Actor Loss: -3124.020462036133
Episode 2926: Time: 0.13728022575378418, Total Reward: 138.08171983494745, Q Loss: 2477.6530838012695, Actor Loss: -1581.070899963379
Episode 2927: Time: 0.18977952003479004, Total Reward: 193.17435902263028, Q Loss: 2744.670524597168, Actor Loss: -2206.1937713623047
Episode 2928: Time: 0.35409116744995117, Total Reward: 370.88622043561037, Q Loss: 6543.68318939209, Actor Loss: -4072.3927307128906
Episode 2929: Time: 0.06949663162231445, Total Reward: 62.9387470656615, Q Loss: 916.2742919921875, Actor Loss: -767.6220245361328
Episode 2930: Time: 0.404665470123291, Total Reward: 427.7756644609221, Q Loss: 7085.770133972168, Actor Loss: -4833.7448806762695
Episode 2931: Time: 0.1721947193145752, Total Reward: 175.71176630945482, Q Loss: 2828.326904296875, Actor Loss: -2038.7274856567383
Episode 2932: Time: 0.24140596389770508, Total Reward: 249.42780252186031, Q Loss: 4031.7628479003906, Actor Loss: -2809.8249435424805
Episode 2933: Time: 0.14633750915527344, Total Reward: 146.99037216898472, Q Loss: 2906.1543350219727, Actor Loss: -1698.535758972168
Episode 2934: Time: 0.19836211204528809, Total Reward: 202.90818238297476, Q Loss: 3392.5904235839844, Actor Loss: -2370.9671325683594
Episode 2935: Time: 0.07767868041992188, Total Reward: 72.45253025167051, Q Loss: 1226.7732162475586, Actor Loss: -905.9751205444336
Episode 2936: Time: 0.2239818572998047, Total Reward: 231.61156009869464, Q Loss: 3692.3385620117188, Actor Loss: -2615.5320434570312
Episode 2937: Time: 0.1293644905090332, Total Reward: 128.93377833180313, Q Loss: 2020.6268920898438, Actor Loss: -1520.7490463256836
Episode 2938: Time: 0.11231732368469238, Total Reward: 110.29027912059594, Q Loss: 1945.6759567260742, Actor Loss: -1321.6959533691406

Episode 2939: Time: 0.08637857437133789, Total Reward: 81.70161212633772, Q Loss: 1696.3596496582031, Actor Loss: -1079.573844909668
Episode 2940: Time: 0.1300504207611084, Total Reward: 128.45887410113357, Q Loss: 2617.3669662475586, Actor Loss: -1589.0997619628906
Episode 2941: Time: 0.5424628257751465, Total Reward: 573.2633389449726, Q Loss: 9613.343406677246, Actor Loss: -6548.196922302246
Episode 2942: Time: 0.24144315719604492, Total Reward: 249.43300764511994, Q Loss: 4241.950897216797, Actor Loss: -2901.286460876465
Episode 2943: Time: 0.3867673873901367, Total Reward: 407.6829604099057, Q Loss: 7468.966285705566, Actor Loss: -4606.959922790527
Episode 2944: Time: 0.27575039863586426, Total Reward: 286.9955512929787, Q Loss: 4493.410339355469, Actor Loss: -3259.2190170288086
Episode 2945: Time: 0.41497039794921875, Total Reward: 436.5113877026086, Q Loss: 6915.473320007324, Actor Loss: -4948.996429443359
Episode 2946: Time: 0.1989576816558838, Total Reward: 202.6174210970277, Q Loss: 3371.821258544922, Actor Loss: -2440.7205352783203
Episode 2947: Time: 0.13034319877624512, Total Reward: 128.71917347169563, Q Loss: 2437.1723861694336, Actor Loss: -1594.4943389892578
Episode 2948: Time: 0.24242734909057617, Total Reward: 249.4377781466983, Q Loss: 4596.637168884277, Actor Loss: -2942.1027908325195
Episode 2949: Time: 0.2754690647125244, Total Reward: 286.9556722067685, Q Loss: 4509.454551696777, Actor Loss: -3226.3281478881836
Episode 2950: Time: 0.15485239028930664, Total Reward: 155.87758376551042, Q Loss: 2947.087356567383, Actor Loss: -1942.8622665405273
Episode 2951: Time: 0.13930821418762207, Total Reward: 138.66432130146904, Q Loss: 2294.197738647461, Actor Loss: -1600.912986755371
Episode 2952: Time: 0.19901680946350098, Total Reward: 202.78393601034875, Q Loss: 3707.5450897216797, Actor Loss: -2449.7589569091797
Episode 2953: Time: 0.1357414722442627, Total Reward: 128.41836734226575, Q Loss: 2383.8411407470703, Actor Loss: -1560.2505416870117
Episode 2954: Time: 0.2249298095703125, Total Reward: 230.05033169024222, Q Loss: 4249.22891998291, Actor Loss: -2678.4208221435547
Episode 2955: Time: 0.1480090618133545, Total Reward: 147.00602202759723, Q Loss: 2817.111831665039, Actor Loss: -1740.6406021118164
Episode 2956: Time: 0.06949329376220703, Total Reward: 63.21150602913081, Q Loss: 1268.3978424072266, Actor Loss: -872.0880889892578
Episode 2957: Time: 0.09507298469543457, Total Reward: 91.73448141738216, Q Loss: 1816.7098846435547, Actor Loss: -1118.367416381836
Episode 2958: Time: 0.30228590965270996, Total Reward: 314.1049597083315, Q Loss: 4766.734901428223, Actor Loss: -3657.7083587646484
Episode 2959: Time: 0.18088912963867188, Total Reward: 183.642188044802, Q Loss: 3097.247802734375, Actor Loss: -2217.666404724121
Episode 2960: Time: 0.2328035831451416, Total Reward: 239.3982641083481, Q Loss: 4320.245384216309, Actor Loss: -2873.2644424438477
Episode 2961: Time: 0.42107295989990234, Total Reward: 446.39439220260357, Q Loss: 7599.036506652832, Actor Loss: -5108.194511413574
Episode 2962: Time: 0.25847697257995605, Total Reward: 267.17220210351394, Q Loss: 4464.3229637146, Actor Loss: -3099.6242065429688
Episode 2963: Time: 0.07762289047241211, Total Reward: 72.59938247279423, Q Loss: 1414.1244659423828, Actor Loss: -939.4028549194336
Episode 2964: Time: 0.25840330123901367, Total Reward: 268.470005004979, Q Loss: 4683.8464279174805, Actor Loss: -3131.2369232177734
Episode 2965: Time: 0.2922065258026123, Total Reward: 305.4000041186412, Q Loss: 5222.997734069824, Actor Loss: -3575.461051940918
Episode 2966: Time: 0.2413468360900879, Total Reward: 249.31251028802788, Q Loss: 4743.397163391113, Actor Loss: -2911.988235473633

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Episode 2967: Time: 0.15477967262268066, Total Reward: 156.9391761064431, Q
Loss: 3031.043731689453, Actor Loss: -1927.194595336914
Episode 2968: Time: 0.16366982460021973, Total Reward: 166.03802292098533, Q
Loss: 3333.697006225586, Actor Loss: -2020.8212280273438
Episode 2969: Time: 0.1633012294769287, Total Reward: 165.75035334008282, Q
Loss: 3375.3675384521484, Actor Loss: -2074.7849349975586
Episode 2970: Time: 0.17249631881713867, Total Reward: 175.34625528798068, Q
Loss: 2953.7373123168945, Actor Loss: -2092.7280502319336
Episode 2971: Time: 0.3276791572570801, Total Reward: 343.03039466127, Q Los
s: 5962.236961364746, Actor Loss: -4048.269577026367
Episode 2972: Time: 0.26676249504089355, Total Reward: 277.87044072139525, Q
Loss: 4668.741683959961, Actor Loss: -3250.062240600586
Episode 2973: Time: 0.15485310554504395, Total Reward: 156.84881657295279, Q
Loss: 3191.1522216796875, Actor Loss: -1912.7635879516602
Episode 2974: Time: 0.19002723693847656, Total Reward: 194.1763194014525, Q
Loss: 3377.1046447753906, Actor Loss: -2313.0783462524414
Episode 2975: Time: 0.2843184471130371, Total Reward: 294.30365473087136, Q
Loss: 4865.108283996582, Actor Loss: -3592.9507369995117
Episode 2976: Time: 0.2499079704284668, Total Reward: 258.99363488995, Q Los
s: 4929.32430267334, Actor Loss: -3193.0327224731445
Episode 2977: Time: 0.1549079418182373, Total Reward: 155.7155834117647, Q L
oss: 3342.9742126464844, Actor Loss: -1937.3608322143555
Episode 2978: Time: 0.09512114524841309, Total Reward: 90.79439688103889, Q
Loss: 1916.781265258789, Actor Loss: -1154.6293869018555
Episode 2979: Time: 0.12937426567077637, Total Reward: 128.85954486180793, Q
Loss: 2259.056251525879, Actor Loss: -1602.3806610107422
Episode 2980: Time: 0.18945097923278809, Total Reward: 192.64968468933094, Q
Loss: 3701.056869506836, Actor Loss: -2340.2688522338867
Episode 2981: Time: 0.23274803161621094, Total Reward: 240.39569491020092, Q
Loss: 4609.749664306641, Actor Loss: -2833.130470275879
Episode 2982: Time: 0.20699024200439453, Total Reward: 212.1595146732262, Q
Loss: 3995.4885177612305, Actor Loss: -2634.88240814209
Episode 2983: Time: 0.12081074714660645, Total Reward: 118.88829188459106, Q
Loss: 2289.7506942749023, Actor Loss: -1579.710594177246
Episode 2984: Time: 0.2673306465148926, Total Reward: 277.32422661211166, Q
Loss: 5078.439163208008, Actor Loss: -3409.258613586426
Episode 2985: Time: 0.09477663040161133, Total Reward: 91.50191658218299, Q
Loss: 1722.5819244384766, Actor Loss: -1191.7703247070312
Episode 2986: Time: 0.336592435836792, Total Reward: 350.54484759727717, Q L
oss: 6209.62784576416, Actor Loss: -4231.957672119141
Episode 2987: Time: 0.19868183135986328, Total Reward: 204.01845288683893, Q
Loss: 3440.530097961426, Actor Loss: -2363.386703491211
Episode 2988: Time: 0.07828950881958008, Total Reward: 71.40789178832824, Q
Loss: 1314.9155960083008, Actor Loss: -954.065299987793
Episode 2989: Time: 0.10348844528198242, Total Reward: 100.5007372483933, Q
Loss: 1880.6380462646484, Actor Loss: -1272.2634658813477
Episode 2990: Time: 0.3535330295562744, Total Reward: 370.8467705582924, Q L
oss: 6759.712432861328, Actor Loss: -4501.720077514648
Episode 2991: Time: 0.07775616645812988, Total Reward: 71.84794128053686, Q
Loss: 1644.1975402832031, Actor Loss: -984.3931579589844
Episode 2992: Time: 0.2586393356323242, Total Reward: 268.9271308654361, Q L
oss: 5145.906562805176, Actor Loss: -3184.053291320801
Episode 2993: Time: 0.34432482719421387, Total Reward: 362.02439816866956, Q
Loss: 6394.596260070801, Actor Loss: -4315.897766113281
Episode 2994: Time: 0.26766204833984375, Total Reward: 276.935087020648, Q L
oss: 5393.661560058594, Actor Loss: -3419.841148376465
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Episode 2995: Time: 0.1551375389099121, Total Reward: 156.75564493150333, Q Loss: 3210.0440063476562, Actor Loss: -1987.7428665161133
Episode 2996: Time: 0.12119865417480469, Total Reward: 119.35565872402915, Q Loss: 2184.70597076416, Actor Loss: -1528.326431274414
Episode 2997: Time: 0.15594053268432617, Total Reward: 156.52183998026877, Q Loss: 2713.2142791748047, Actor Loss: -1936.538963317871
Episode 2998: Time: 0.15592622756958008, Total Reward: 156.2879950284732, Q Loss: 2964.042724609375, Actor Loss: -1924.0283432006836
Episode 2999: Time: 0.19873666763305664, Total Reward: 202.54547414130636, Q Loss: 3387.211082458496, Actor Loss: -2493.5815353393555
Validation Mean: 444.1743708206403, Validation Std: 181.63165321632746
saving model
Episode 3000: Time: 0.21765375137329102, Total Reward: 221.72545022527976, Q Loss: 4340.063888549805, Actor Loss: -2737.1754455566406
Episode 3001: Time: 0.29448962211608887, Total Reward: 304.5977778415895, Q Loss: 6130.557762145996, Actor Loss: -3698.6950454711914
Episode 3002: Time: 0.49174046516418457, Total Reward: 520.1213582403639, Q Loss: 9561.516311645508, Actor Loss: -6257.544486999512
Episode 3003: Time: 0.12100076675415039, Total Reward: 119.32653490010547, Q Loss: 2191.9332733154297, Actor Loss: -1511.7655029296875
Episode 3004: Time: 0.1821579933166504, Total Reward: 184.54623065586486, Q Loss: 3758.067710876465, Actor Loss: -2285.8992233276367
Episode 3005: Time: 0.22652792930603027, Total Reward: 231.02377649745551, Q Loss: 4499.965934753418, Actor Loss: -2894.7152099609375
Episode 3006: Time: 0.18158650398254395, Total Reward: 185.18417713522638, Q Loss: 3557.2425689697266, Actor Loss: -2324.988395690918
Episode 3007: Time: 0.24187183380126953, Total Reward: 248.82234569569889, Q Loss: 4525.400375366211, Actor Loss: -3127.5608673095703
Episode 3008: Time: 0.23383522033691406, Total Reward: 240.43258232929966, Q Loss: 4372.436180114746, Actor Loss: -2923.0710220336914
Episode 3009: Time: 0.1383061408996582, Total Reward: 138.36288472239633, Q Loss: 3224.3473739624023, Actor Loss: -1772.328598022461
Episode 3010: Time: 0.34998154640197754, Total Reward: 362.1256673850079, Q Loss: 7086.645645141602, Actor Loss: -4346.171005249023
Episode 3011: Time: 0.26125359535217285, Total Reward: 268.6512566520898, Q Loss: 5242.635559082031, Actor Loss: -3353.4202728271484
Episode 3012: Time: 0.3801853656768799, Total Reward: 399.46094800192236, Q Loss: 7962.236747741699, Actor Loss: -5004.601829528809
Episode 3013: Time: 0.15572142601013184, Total Reward: 156.3585988007076, Q Loss: 3050.8437423706055, Actor Loss: -2039.11962890625
Episode 3014: Time: 0.29346776008605957, Total Reward: 304.60147607306675, Q Loss: 6094.626983642578, Actor Loss: -3844.8693237304688
Episode 3015: Time: 0.2688257694244385, Total Reward: 276.822035091961, Q Loss: 5168.028491973877, Actor Loss: -3439.0225219726562
Episode 3016: Time: 0.4238138198852539, Total Reward: 444.17718963835483, Q Loss: 7979.878753662109, Actor Loss: -5603.866348266602
Episode 3017: Time: 0.10390043258666992, Total Reward: 100.80766950922019, Q Loss: 2087.433853149414, Actor Loss: -1382.4202346801758
Episode 3018: Time: 0.276536226272583, Total Reward: 287.3160865418526, Q Loss: 5866.201309204102, Actor Loss: -3689.9649505615234
Episode 3019: Time: 0.20714545249938965, Total Reward: 212.53552303983074, Q Loss: 4665.259132385254, Actor Loss: -2719.3629989624023
Episode 3020: Time: 0.34537768363952637, Total Reward: 361.81933518792187, Q Loss: 7372.672653198242, Actor Loss: -4577.041633605957
Episode 3021: Time: 0.47252488136291504, Total Reward: 501.31034165352395, Q Loss: 10026.67928314209, Actor Loss: -6316.935348510742

Episode 3022: Time: 0.30992794036865234, Total Reward: 324.4965186898316, Q Loss: 6566.743698120117, Actor Loss: -4123.039878845215
Episode 3023: Time: 0.08661031723022461, Total Reward: 82.05677651270594, Q Loss: 1720.223403930664, Actor Loss: -1170.1322784423828
Episode 3024: Time: 0.07786273956298828, Total Reward: 71.53539436253513, Q Loss: 1848.8194274902344, Actor Loss: -1005.6688766479492
Episode 3025: Time: 0.07820463180541992, Total Reward: 72.79203771405429, Q Loss: 1494.1408386230469, Actor Loss: -1011.3569793701172
Episode 3026: Time: 0.19828224182128906, Total Reward: 201.623216617582, Q Loss: 4543.716651916504, Actor Loss: -2656.7940826416016
Episode 3027: Time: 0.25023794174194336, Total Reward: 258.5246542508427, Q Loss: 5123.338623046875, Actor Loss: -3352.5828704833984
Episode 3028: Time: 0.21517372131347656, Total Reward: 220.98284859997617, Q Loss: 4623.440734863281, Actor Loss: -2790.9888229370117
Episode 3029: Time: 0.2064812183380127, Total Reward: 211.38471857119978, Q Loss: 4021.6618270874023, Actor Loss: -2704.7241439819336
Episode 3030: Time: 0.3442668914794922, Total Reward: 359.63169448483063, Q Loss: 6936.086387634277, Actor Loss: -4644.864906311035
Episode 3031: Time: 0.07759380340576172, Total Reward: 73.05722568954369, Q Loss: 1645.1765747070312, Actor Loss: -1081.4547882080078
Episode 3032: Time: 0.2753901481628418, Total Reward: 286.7586011862074, Q Loss: 6253.166793823242, Actor Loss: -3805.069755554199
Episode 3033: Time: 0.2668802738189697, Total Reward: 278.58807175624895, Q Loss: 5390.03205871582, Actor Loss: -3625.3378677368164
Episode 3034: Time: 0.21631240844726562, Total Reward: 221.89169013377156, Q Loss: 4633.504623413086, Actor Loss: -2870.7877044677734
Episode 3035: Time: 0.1468815803527832, Total Reward: 146.57416653030052, Q Loss: 3198.2881240844727, Actor Loss: -1963.1933212280273
Episode 3036: Time: 0.259371280670166, Total Reward: 269.0171922842614, Q Loss: 5558.556716918945, Actor Loss: -3435.9607696533203
Episode 3037: Time: 0.15603923797607422, Total Reward: 157.163365575904, Q Loss: 2899.676826477051, Actor Loss: -2081.102470397949
Episode 3038: Time: 0.09531903266906738, Total Reward: 91.50805848553027, Q Loss: 2342.3574829101562, Actor Loss: -1281.0515518188477
Episode 3039: Time: 0.16382336616516113, Total Reward: 164.1358628829562, Q Loss: 3223.86759185791, Actor Loss: -2170.9546279907227
Episode 3040: Time: 0.07857036590576172, Total Reward: 71.16857146153153, Q Loss: 1562.0977020263672, Actor Loss: -1048.9024200439453
Episode 3041: Time: 0.319774866104126, Total Reward: 333.96200616778316, Q Loss: 6318.978675842285, Actor Loss: -4326.811721801758
Episode 3042: Time: 0.10355138778686523, Total Reward: 101.14192456950381, Q Loss: 2150.875633239746, Actor Loss: -1381.0852508544922
Episode 3043: Time: 0.3018038272857666, Total Reward: 315.34823721069, Q Loss: 6384.603355407715, Actor Loss: -4117.594795227051
Episode 3044: Time: 0.21621203422546387, Total Reward: 220.4241847471274, Q Loss: 5280.670509338379, Actor Loss: -2875.3975830078125
Episode 3045: Time: 0.21594500541687012, Total Reward: 222.4675801770312, Q Loss: 4691.624206542969, Actor Loss: -2892.2432022094727
Episode 3046: Time: 0.20763516426086426, Total Reward: 213.27908693398157, Q Loss: 4186.973976135254, Actor Loss: -2831.2680435180664
Episode 3047: Time: 0.2076878547668457, Total Reward: 212.48939904303876, Q Loss: 4686.176429748535, Actor Loss: -2776.5133209228516
Episode 3048: Time: 0.22487783432006836, Total Reward: 230.49753447838074, Q Loss: 4605.365982055664, Actor Loss: -3041.474220275879
Episode 3049: Time: 0.17261409759521484, Total Reward: 174.6839632490805, Q Loss: 3893.284507751465, Actor Loss: -2399.6313400268555

Episode 3050: Time: 0.29335713386535645, Total Reward: 305.32857429995994, Q Loss: 6312.603370666504, Actor Loss: -3938.0855407714844
Episode 3051: Time: 0.17254853248596191, Total Reward: 175.20756178406307, Q Loss: 3748.276382446289, Actor Loss: -2354.1902389526367
Episode 3052: Time: 0.24268794059753418, Total Reward: 248.86806850597745, Q Loss: 5101.03205871582, Actor Loss: -3275.907684326172
Episode 3053: Time: 0.3285377025604248, Total Reward: 342.78969425390835, Q Loss: 6755.351333618164, Actor Loss: -4489.119789123535
Episode 3054: Time: 0.25078821182250977, Total Reward: 258.98693532926774, Q Loss: 5354.368576049805, Actor Loss: -3327.0319442749023
Episode 3055: Time: 0.33629751205444336, Total Reward: 350.4794646363363, Q Loss: 7344.097747802734, Actor Loss: -4617.679161071777
Episode 3056: Time: 0.4832620620727539, Total Reward: 511.1146869500967, Q Loss: 10193.485305786133, Actor Loss: -6680.968940734863
Episode 3057: Time: 0.1814262866973877, Total Reward: 184.69277105104987, Q Loss: 3834.717758178711, Actor Loss: -2519.9525833129883
Episode 3058: Time: 0.7077949047088623, Total Reward: 753.668187025341, Q Loss: 15156.074829101562, Actor Loss: -9815.20987701416
Episode 3059: Time: 0.19899892807006836, Total Reward: 202.4865340012589, Q Loss: 4087.4500427246094, Actor Loss: -2754.7019424438477
Episode 3060: Time: 0.27568602561950684, Total Reward: 284.65461963748004, Q Loss: 5839.723686218262, Actor Loss: -3847.471824645996
Episode 3061: Time: 0.18957972526550293, Total Reward: 194.31805915457667, Q Loss: 4106.0096435546875, Actor Loss: -2654.8936614990234
Episode 3062: Time: 0.21555423736572266, Total Reward: 220.13173236617007, Q Loss: 5553.121017456055, Actor Loss: -3044.014518737793
Episode 3063: Time: 0.22396111488342285, Total Reward: 231.9024497122243, Q Loss: 4911.3753662109375, Actor Loss: -3009.75594329834
Episode 3064: Time: 0.32808971405029297, Total Reward: 342.3623254669902, Q Loss: 7499.515716552734, Actor Loss: -4663.056617736816
Episode 3065: Time: 0.26711392402648926, Total Reward: 275.13805096210643, Q Loss: 6168.922462463379, Actor Loss: -3727.276496887207
Episode 3066: Time: 0.18961405754089355, Total Reward: 192.84075682781491, Q Loss: 4296.081069946289, Actor Loss: -2711.4495010375977
Episode 3067: Time: 0.2605764865875244, Total Reward: 267.4667364838128, Q Loss: 6019.720184326172, Actor Loss: -3770.2833251953125
Episode 3068: Time: 0.28496479988098145, Total Reward: 296.21839921915796, Q Loss: 6708.070373535156, Actor Loss: -4039.2578048706055
Episode 3069: Time: 0.20710039138793945, Total Reward: 212.5908439191343, Q Loss: 4170.316749572754, Actor Loss: -2910.2247772216797
Episode 3070: Time: 0.2929997444152832, Total Reward: 304.67166964706524, Q Loss: 7245.581970214844, Actor Loss: -4153.043998718262
Episode 3071: Time: 0.4138157367706299, Total Reward: 436.2461321021063, Q Loss: 8747.817817687988, Actor Loss: -5804.129493713379
Episode 3072: Time: 0.12087082862854004, Total Reward: 119.82261915055943, Q Loss: 2983.6446685791016, Actor Loss: -1727.6472396850586
Episode 3073: Time: 0.1210932731628418, Total Reward: 119.68465149648745, Q Loss: 3132.476547241211, Actor Loss: -1724.2284774780273
Episode 3074: Time: 0.29352688789367676, Total Reward: 304.38139858712105, Q Loss: 6738.669723510742, Actor Loss: -4162.515411376953
Episode 3075: Time: 0.2172083854675293, Total Reward: 218.94948983880238, Q Loss: 4640.010856628418, Actor Loss: -3050.546211242676
Episode 3076: Time: 0.19042563438415527, Total Reward: 194.0196985555105, Q Loss: 4029.0082473754883, Actor Loss: -2766.132797241211
Episode 3077: Time: 0.19122982025146484, Total Reward: 194.2835863858353, Q Loss: 4100.692008972168, Actor Loss: -2700.259132385254

Episode 3078: Time: 0.15775728225708008, Total Reward: 156.41705414509897, Q Loss: 3391.640953063965, Actor Loss: -2270.1915283203125
Episode 3079: Time: 0.260608434677124, Total Reward: 267.95391535723275, Q Loss: 5658.290565490723, Actor Loss: -3679.3138732910156
Episode 3080: Time: 0.17340326309204102, Total Reward: 175.35950305833643, Q Loss: 3405.722427368164, Actor Loss: -2500.7980728149414
Episode 3081: Time: 0.130357027053833, Total Reward: 128.8389291078391, Q Loss: 3187.253463745117, Actor Loss: -1820.1660385131836
Episode 3082: Time: 0.09522247314453125, Total Reward: 91.32830457212063, Q Loss: 2020.0783233642578, Actor Loss: -1384.881118774414
Episode 3083: Time: 0.14740657806396484, Total Reward: 147.43018568155884, Q Loss: 3261.5352325439453, Actor Loss: -2108.0995864868164
Episode 3084: Time: 0.2078089714050293, Total Reward: 212.41380828166422, Q Loss: 4931.519905090332, Actor Loss: -2930.256561279297
Episode 3085: Time: 0.11322498321533203, Total Reward: 110.41023636435052, Q Loss: 2285.038299560547, Actor Loss: -1561.2024688720703
Episode 3086: Time: 0.19902634620666504, Total Reward: 202.6044928535763, Q Loss: 4805.960632324219, Actor Loss: -2864.078582763672
Episode 3087: Time: 0.07870030403137207, Total Reward: 72.53825909941722, Q Loss: 1546.487564086914, Actor Loss: -1125.5111236572266
Episode 3088: Time: 0.24128055572509766, Total Reward: 248.23686760254776, Q Loss: 5768.2907791137695, Actor Loss: -3506.8655014038086
Episode 3089: Time: 0.18085360527038574, Total Reward: 183.14412000445347, Q Loss: 3822.5023651123047, Actor Loss: -2612.3236083984375
Episode 3090: Time: 0.4469897747039795, Total Reward: 474.1971999407956, Q Loss: 10386.466331481934, Actor Loss: -6416.2971267700195
Episode 3091: Time: 0.17180156707763672, Total Reward: 173.5677124024575, Q Loss: 3632.2595977783203, Actor Loss: -2446.3454818725586
Episode 3092: Time: 0.12089180946350098, Total Reward: 119.78344024276869, Q Loss: 2954.1603927612305, Actor Loss: -1812.9293212890625
Episode 3093: Time: 0.2923710346221924, Total Reward: 305.7529819150799, Q Loss: 6701.356155395508, Actor Loss: -4174.114791870117
Episode 3094: Time: 0.17159771919250488, Total Reward: 175.39066026208218, Q Loss: 4357.181503295898, Actor Loss: -2609.2933654785156
Episode 3095: Time: 0.30117011070251465, Total Reward: 314.4889643355845, Q Loss: 6600.515022277832, Actor Loss: -4260.288238525391
Episode 3096: Time: 0.4135279655456543, Total Reward: 434.66025479894193, Q Loss: 9612.679412841797, Actor Loss: -5843.612342834473
Episode 3097: Time: 0.27515387535095215, Total Reward: 284.52175792640924, Q Loss: 6738.7204513549805, Actor Loss: -4030.609176635742
Episode 3098: Time: 0.30927133560180664, Total Reward: 324.9631875229485, Q Loss: 7136.105674743652, Actor Loss: -4569.360877990723
Episode 3099: Time: 0.31969714164733887, Total Reward: 333.8308118812887, Q Loss: 7406.135139465332, Actor Loss: -4631.910453796387
Validation Mean: 429.65561025082826, Validation Std: 148.5610941467148
saving model
Episode 3100: Time: 0.32024717330932617, Total Reward: 333.9429116945448, Q Loss: 7681.0428466796875, Actor Loss: -4704.504974365234
Episode 3101: Time: 0.3533310890197754, Total Reward: 370.5407460434125, Q Loss: 8827.345893859863, Actor Loss: -5224.961708068848
Episode 3102: Time: 0.12058639526367188, Total Reward: 119.20175440783365, Q Loss: 2805.0527267456055, Actor Loss: -1747.6826858520508
Episode 3103: Time: 0.25864315032958984, Total Reward: 268.19986578705374, Q Loss: 5579.621772766113, Actor Loss: -3878.3776245117188
Episode 3104: Time: 0.31983351707458496, Total Reward: 333.1647305927943, Q Loss: 7347.648597717285, Actor Loss: -4676.246788024902

Episode 3105: Time: 0.3535628318786621, Total Reward: 371.09139777485854, Q Loss: 8072.611129760742, Actor Loss: -5323.571395874023
Episode 3106: Time: 0.2327404022216797, Total Reward: 239.15825880064835, Q Loss: 5888.439727783203, Actor Loss: -3607.8180618286133
Episode 3107: Time: 0.24991798400878906, Total Reward: 258.63589842008884, Q Loss: 4802.436141967773, Actor Loss: -3747.0090866088867
Episode 3108: Time: 0.3359713554382324, Total Reward: 352.6004431531164, Q Loss: 7893.232696533203, Actor Loss: -5018.050491333008
Episode 3109: Time: 0.18082380294799805, Total Reward: 183.49583383206058, Q Loss: 4316.344696044922, Actor Loss: -2727.321937561035
Episode 3110: Time: 0.13826799392700195, Total Reward: 138.29721149756514, Q Loss: 3613.7535705566406, Actor Loss: -2117.254768371582
Episode 3111: Time: 0.18103861808776855, Total Reward: 185.15611650716582, Q Loss: 4295.063766479492, Actor Loss: -2714.457809448242
Episode 3112: Time: 0.14662408828735352, Total Reward: 147.04884127369203, Q Loss: 2906.868263244629, Actor Loss: -2186.084297180176
Episode 3113: Time: 0.05208778381347656, Total Reward: 44.054359937202776, Q Loss: 1199.5588073730469, Actor Loss: -829.7164993286133
Episode 3114: Time: 0.12945079803466797, Total Reward: 127.44307510751872, Q Loss: 2889.3977279663086, Actor Loss: -1946.528091430664
Episode 3115: Time: 0.16529130935668945, Total Reward: 165.88124814860345, Q Loss: 3512.3023986816406, Actor Loss: -2509.049415588379
Episode 3116: Time: 0.21617341041564941, Total Reward: 219.5447786377819, Q Loss: 5007.935615539551, Actor Loss: -3230.9709854125977
Episode 3117: Time: 0.07848429679870605, Total Reward: 72.81086898425534, Q Loss: 1794.3309478759766, Actor Loss: -1127.771141052246
Episode 3118: Time: 0.24993181228637695, Total Reward: 258.48896841965245, Q Loss: 5275.81999206543, Actor Loss: -3789.1724700927734
Episode 3119: Time: 0.18069052696228027, Total Reward: 185.2545109575808, Q Loss: 4039.072166442871, Actor Loss: -2762.0922775268555
Episode 3120: Time: 0.2759521007537842, Total Reward: 283.92176930324615, Q Loss: 5640.206024169922, Actor Loss: -4117.632369995117
Episode 3121: Time: 0.18955111503601074, Total Reward: 192.29356191901775, Q Loss: 4620.672981262207, Actor Loss: -2874.0499114990234
Episode 3122: Time: 0.32765841484069824, Total Reward: 342.4077602632518, Q Loss: 8439.779754638672, Actor Loss: -5082.576835632324
Episode 3123: Time: 0.3283114433288574, Total Reward: 342.73138168517585, Q Loss: 7514.608963012695, Actor Loss: -5006.330497741699
Episode 3124: Time: 0.09527134895324707, Total Reward: 91.6130663625061, Q Loss: 2358.2566452026367, Actor Loss: -1417.1962051391602
Episode 3125: Time: 0.1903533935546875, Total Reward: 193.4300149715286, Q Loss: 4361.772552490234, Actor Loss: -2897.7408142089844
Episode 3126: Time: 0.17261934280395508, Total Reward: 174.80904685950802, Q Loss: 3914.366241455078, Actor Loss: -2708.5892181396484
Episode 3127: Time: 0.44461798667907715, Total Reward: 460.9152650842327, Q Loss: 10199.35147857666, Actor Loss: -6725.27131652832
Episode 3128: Time: 0.32062697410583496, Total Reward: 333.73458590749743, Q Loss: 6954.623741149902, Actor Loss: -4883.3725662231445
Episode 3129: Time: 0.1295325756072998, Total Reward: 128.72097308451202, Q Loss: 2729.9560012817383, Actor Loss: -2008.5028381347656
Episode 3130: Time: 0.1729419231414795, Total Reward: 175.23481420684269, Q Loss: 3870.863945007324, Actor Loss: -2760.008544921875
Episode 3131: Time: 0.3535041809082031, Total Reward: 369.5007548208356, Q Loss: 8592.70238494873, Actor Loss: -5473.182861328125
Episode 3132: Time: 0.1473839282989502, Total Reward: 147.29120651978351, Q Loss: 4047.2155990600586, Actor Loss: -2294.9068756103516

Episode 3133: Time: 0.11325526237487793, Total Reward: 110.13326170328536, Q Loss: 2556.278366088867, Actor Loss: -1755.4349975585938
Episode 3134: Time: 0.3743443489074707, Total Reward: 388.9136860267899, Q Loss: 8589.346824645996, Actor Loss: -5817.598876953125
Episode 3135: Time: 0.2596912384033203, Total Reward: 267.668148960792, Q Loss: 5977.3266525268555, Actor Loss: -4075.915771484375
Episode 3136: Time: 0.12073755264282227, Total Reward: 119.53428566799167, Q Loss: 3281.1910705566406, Actor Loss: -1872.1266326904297
Episode 3137: Time: 0.21678566932678223, Total Reward: 219.5482506086833, Q Loss: 5675.406845092773, Actor Loss: -3276.553482055664
Episode 3138: Time: 0.5011751651763916, Total Reward: 529.8766050209138, Q Loss: 10920.357536315918, Actor Loss: -7757.970458984375
Episode 3139: Time: 0.44332170486450195, Total Reward: 464.87641500931335, Q Loss: 11000.320999145508, Actor Loss: -6851.292465209961
Episode 3140: Time: 0.30478572845458984, Total Reward: 314.96598218220674, Q Loss: 7330.214881896973, Actor Loss: -4771.427574157715
Episode 3141: Time: 0.14831304550170898, Total Reward: 146.25854156768696, Q Loss: 3330.5327072143555, Actor Loss: -2278.182014465332
Episode 3142: Time: 0.28700971603393555, Total Reward: 296.5064025742437, Q Loss: 7124.905822753906, Actor Loss: -4447.114448547363
Episode 3143: Time: 0.2250220775604248, Total Reward: 221.5144121461025, Q Loss: 5122.034469604492, Actor Loss: -3379.761032104492
Episode 3144: Time: 0.21789765357971191, Total Reward: 221.55736225758926, Q Loss: 5232.752311706543, Actor Loss: -3407.9629287719727
Episode 3145: Time: 0.5112318992614746, Total Reward: 537.1780574661572, Q Loss: 11890.108901977539, Actor Loss: -7910.881729125977
Episode 3146: Time: 0.12110209465026855, Total Reward: 119.37639932148632, Q Loss: 2811.4400329589844, Actor Loss: -1930.2975463867188
Episode 3147: Time: 0.34572339057922363, Total Reward: 361.5833177543121, Q Loss: 8722.857833862305, Actor Loss: -5310.214691162109
Episode 3148: Time: 0.27640771865844727, Total Reward: 287.90291246291173, Q Loss: 6010.915855407715, Actor Loss: -4333.321434020996
Episode 3149: Time: 0.41426515579223633, Total Reward: 436.3277057172288, Q Loss: 10586.487731933594, Actor Loss: -6698.397399902344
Episode 3150: Time: 0.6461622714996338, Total Reward: 689.0510152109131, Q Loss: 15478.318405151367, Actor Loss: -10338.460586547852
Episode 3151: Time: 0.2673153877258301, Total Reward: 277.41051019870815, Q Loss: 6183.847244262695, Actor Loss: -4305.919357299805
Episode 3152: Time: 0.19891977310180664, Total Reward: 201.9562732457747, Q Loss: 4208.158515930176, Actor Loss: -3167.8989791870117
Episode 3153: Time: 0.32912111282348633, Total Reward: 341.9388347844063, Q Loss: 8075.514404296875, Actor Loss: -5171.303527832031
Episode 3154: Time: 0.2856028079986572, Total Reward: 296.8153320994995, Q Loss: 6931.294143676758, Actor Loss: -4557.583045959473
Episode 3155: Time: 0.37143659591674805, Total Reward: 390.40349446825314, Q Loss: 9856.995376586914, Actor Loss: -6058.785705566406
Episode 3156: Time: 0.19833922386169434, Total Reward: 203.61596793881168, Q Loss: 5315.893493652344, Actor Loss: -3216.0981063842773
Episode 3157: Time: 0.1558835506439209, Total Reward: 156.64023863445576, Q Loss: 4050.3756561279297, Actor Loss: -2605.9083709716797
Episode 3158: Time: 0.10362696647644043, Total Reward: 100.76886954758733, Q Loss: 2477.946144104004, Actor Loss: -1676.0764770507812
Episode 3159: Time: 0.29312658309936523, Total Reward: 306.11869520013335, Q Loss: 6986.192825317383, Actor Loss: -4691.910179138184
Episode 3160: Time: 0.14696431159973145, Total Reward: 146.9681068647972, Q Loss: 3841.3871307373047, Actor Loss: -2440.0586853027344

Episode 3161: Time: 0.33647632598876953, Total Reward: 351.41250762181994, Q Loss: 8176.809959411621, Actor Loss: -5438.4791259765625
Episode 3162: Time: 0.2507753372192383, Total Reward: 259.331589258858, Q Loss: 5903.813331604004, Actor Loss: -4074.5846405029297
Episode 3163: Time: 0.08632922172546387, Total Reward: 81.8267181893184, Q Loss: 1717.582878112793, Actor Loss: -1384.9786834716797
Episode 3164: Time: 0.12976980209350586, Total Reward: 129.21573840858625, Q Loss: 3623.523635864258, Actor Loss: -2104.6284790039062
Episode 3165: Time: 0.44857192039489746, Total Reward: 472.5521329133707, Q Loss: 10928.901977539062, Actor Loss: -7304.036430358887
Episode 3166: Time: 0.09511923789978027, Total Reward: 91.66167097483718, Q Loss: 1992.49462890625, Actor Loss: -1510.1786193847656
Episode 3167: Time: 0.5503828525543213, Total Reward: 585.6652000495878, Q Loss: 13240.249473571777, Actor Loss: -8976.649917602539
Episode 3168: Time: 0.31052494049072266, Total Reward: 324.2469335654851, Q Loss: 8269.889183044434, Actor Loss: -5061.614768981934
Episode 3169: Time: 0.1729288101196289, Total Reward: 175.53955670590926, Q Loss: 4523.879661560059, Actor Loss: -2733.3504180908203
Episode 3170: Time: 0.10431504249572754, Total Reward: 101.075889185401, Q Loss: 2792.548049926758, Actor Loss: -1751.959457397461
Episode 3171: Time: 0.2586510181427002, Total Reward: 268.49188155894535, Q Loss: 6917.166290283203, Actor Loss: -4242.635795593262
Episode 3172: Time: 0.2066495418548584, Total Reward: 211.84934274131922, Q Loss: 4990.371475219727, Actor Loss: -3488.867172241211
Episode 3173: Time: 0.19827604293823242, Total Reward: 203.71377030569428, Q Loss: 4845.7813720703125, Actor Loss: -3319.897331237793
Episode 3174: Time: 0.2077784538269043, Total Reward: 211.5600284283546, Q Loss: 5504.981101989746, Actor Loss: -3541.962257385254
Episode 3175: Time: 0.20786166191101074, Total Reward: 212.0264403588715, Q Loss: 5155.079383850098, Actor Loss: -3360.1377334594727
Episode 3176: Time: 0.49153637886047363, Total Reward: 518.2901252240082, Q Loss: 12897.69165802002, Actor Loss: -8208.207244873047
Episode 3177: Time: 0.35385870933532715, Total Reward: 368.6889852442522, Q Loss: 8667.84684753418, Actor Loss: -5789.664680480957
Episode 3178: Time: 0.07780623435974121, Total Reward: 72.24962249938058, Q Loss: 1532.830810546875, Actor Loss: -1280.9232482910156
Episode 3179: Time: 0.2502892017364502, Total Reward: 259.5267686465822, Q Loss: 5948.555953979492, Actor Loss: -4184.505226135254
Episode 3180: Time: 0.44699883460998535, Total Reward: 471.92778500698273, Q Loss: 11066.243034362793, Actor Loss: -7531.521110534668
Episode 3181: Time: 0.27515077590942383, Total Reward: 285.3540616736467, Q Loss: 8319.978652954102, Actor Loss: -4583.151832580566
Episode 3182: Time: 0.1725606918334961, Total Reward: 175.35591452222593, Q Loss: 4540.041732788086, Actor Loss: -2890.4341735839844
Episode 3183: Time: 0.17287302017211914, Total Reward: 174.59138806474144, Q Loss: 4618.041664123535, Actor Loss: -2812.432441711426
Episode 3184: Time: 0.29355311393737793, Total Reward: 306.66264493017223, Q Loss: 7829.318008422852, Actor Loss: -4953.17244720459
Episode 3185: Time: 0.24163246154785156, Total Reward: 249.69203287845744, Q Loss: 5583.059783935547, Actor Loss: -4086.0316467285156
Episode 3186: Time: 0.1814415454864502, Total Reward: 184.77654882839096, Q Loss: 4618.87744140625, Actor Loss: -3041.351905822754
Episode 3187: Time: 0.2583317756652832, Total Reward: 267.8529428187427, Q Loss: 7250.775177001953, Actor Loss: -4310.980049133301
Episode 3188: Time: 0.14111804962158203, Total Reward: 119.2589421602117, Q Loss: 2695.9342041015625, Actor Loss: -1998.2988586425781

Episode 3189: Time: 0.3361077308654785, Total Reward: 352.72015224686817, Q Loss: 9559.561874389648, Actor Loss: -5696.145774841309
Episode 3190: Time: 0.3969132900238037, Total Reward: 416.1498970365311, Q Loss: 10469.545295715332, Actor Loss: -6620.421615600586
Episode 3191: Time: 0.24159455299377441, Total Reward: 249.82242707253909, Q Loss: 6308.686180114746, Actor Loss: -4116.518493652344
Episode 3192: Time: 0.25922322273254395, Total Reward: 266.59066209059057, Q Loss: 6816.820938110352, Actor Loss: -4321.555763244629
Episode 3193: Time: 0.12070727348327637, Total Reward: 119.31365575194981, Q Loss: 3242.1544647216797, Actor Loss: -2016.5362548828125
Episode 3194: Time: 0.13028478622436523, Total Reward: 128.85638542477284, Q Loss: 2967.5685501098633, Actor Loss: -2187.986038208008
Episode 3195: Time: 0.2859957218170166, Total Reward: 296.3080654174215, Q Loss: 8431.109771728516, Actor Loss: -4887.984939575195
Episode 3196: Time: 0.2842085361480713, Total Reward: 295.30985406029083, Q Loss: 8001.045257568359, Actor Loss: -4936.989898681641
Episode 3197: Time: 0.2583503723144531, Total Reward: 265.8158093692146, Q Loss: 6246.22917175293, Actor Loss: -4414.372589111328
Episode 3198: Time: 0.3272120952606201, Total Reward: 340.99057557816354, Q Loss: 9422.40234375, Actor Loss: -5589.438636779785
Episode 3199: Time: 0.3021552562713623, Total Reward: 314.3701541052112, Q Loss: 8100.758010864258, Actor Loss: -5142.026679992676
Validation Mean: 470.7117573329534, Validation Std: 183.55274651805945
saving model
Episode 3200: Time: 0.30406808853149414, Total Reward: 314.56260320806837, Q Loss: 7674.868713378906, Actor Loss: -5094.702545166016
Episode 3201: Time: 0.2935793399810791, Total Reward: 305.906461003073, Q Loss: 8939.194984436035, Actor Loss: -5143.168922424316
Episode 3202: Time: 0.12091326713562012, Total Reward: 119.33076229124745, Q Loss: 3397.8766860961914, Actor Loss: -2002.7283020019531
Episode 3203: Time: 0.2069103717803955, Total Reward: 212.29339245994944, Q Loss: 5413.318023681641, Actor Loss: -3545.0225830078125
Episode 3204: Time: 0.08632421493530273, Total Reward: 82.52096504634594, Q Loss: 1948.5790557861328, Actor Loss: -1438.33935546875
Episode 3205: Time: 0.32711338996887207, Total Reward: 342.1432016960662, Q Loss: 8255.09546661377, Actor Loss: -5762.886245727539
Episode 3206: Time: 0.1464402675628662, Total Reward: 147.92323908105462, Q Loss: 3459.989646911621, Actor Loss: -2506.0578842163086
Episode 3207: Time: 0.23296236991882324, Total Reward: 240.13251827159135, Q Loss: 5525.701240539551, Actor Loss: -4120.79963684082
Episode 3208: Time: 0.3276102542877197, Total Reward: 342.69916550237156, Q Loss: 9250.225814819336, Actor Loss: -5591.414520263672
Episode 3209: Time: 0.16381359100341797, Total Reward: 165.62662371363544, Q Loss: 4794.617034912109, Actor Loss: -2840.192367553711
Episode 3210: Time: 0.20673465728759766, Total Reward: 213.15808091346, Q Loss: 5287.729301452637, Actor Loss: -3609.6780853271484
Episode 3211: Time: 0.10393452644348145, Total Reward: 100.56152825667616, Q Loss: 2989.6141967773438, Actor Loss: -1811.7530670166016
Episode 3212: Time: 0.30224013328552246, Total Reward: 314.09621577165944, Q Loss: 8964.747871398926, Actor Loss: -5213.935264587402
Episode 3213: Time: 0.20683789253234863, Total Reward: 212.81761794318422, Q Loss: 5208.321762084961, Actor Loss: -3511.34366607666
Episode 3214: Time: 0.3100264072418213, Total Reward: 323.6786756165141, Q Loss: 8896.97777557373, Actor Loss: -5514.509635925293
Episode 3215: Time: 0.17234420776367188, Total Reward: 175.41484570083773, Q Loss: 4369.621063232422, Actor Loss: -3043.9256896972656

Episode 3216: Time: 0.25867772102355957, Total Reward: 266.9198073479411, Q Loss: 6694.850791931152, Actor Loss: -4588.772605895996
Episode 3217: Time: 0.2414844036102295, Total Reward: 250.81313737939277, Q Loss: 6455.954315185547, Actor Loss: -4306.673049926758
Episode 3218: Time: 0.17213106155395508, Total Reward: 174.98542080456005, Q Loss: 4454.503570556641, Actor Loss: -3049.3848266601562
Episode 3219: Time: 0.11284708976745605, Total Reward: 109.84519104929578, Q Loss: 3620.279495239258, Actor Loss: -1966.4902954101562
Episode 3220: Time: 0.103759765625, Total Reward: 100.86160790434856, Q Loss: 2869.4188079833984, Actor Loss: -1777.9443664550781
Episode 3221: Time: 0.35314321517944336, Total Reward: 369.72818258702273, Q Loss: 10517.117683410645, Actor Loss: -6242.116981506348
Episode 3222: Time: 0.32697319984436035, Total Reward: 341.3904241423739, Q Loss: 8930.41822052002, Actor Loss: -5755.6199951171875
Episode 3223: Time: 0.2413632869720459, Total Reward: 249.8288595761722, Q Loss: 6709.193710327148, Actor Loss: -4358.961318969727
Episode 3224: Time: 0.17264556884765625, Total Reward: 174.66883028080895, Q Loss: 4959.708251953125, Actor Loss: -3057.6590881347656
Episode 3225: Time: 0.11257433891296387, Total Reward: 110.11949986332316, Q Loss: 3157.2158584594727, Actor Loss: -1989.6396942138672
Episode 3226: Time: 0.10353279113769531, Total Reward: 100.2062188252063, Q Loss: 3045.5941772460938, Actor Loss: -1911.241195678711
Episode 3227: Time: 0.11242008209228516, Total Reward: 110.17646173184377, Q Loss: 2940.9752044677734, Actor Loss: -1954.7748336791992
Episode 3228: Time: 0.30204010009765625, Total Reward: 315.2902087089644, Q Loss: 8415.893524169922, Actor Loss: -5504.005477905273
Episode 3229: Time: 0.28456902503967285, Total Reward: 296.57678270801375, Q Loss: 7935.491287231445, Actor Loss: -5033.910614013672
Episode 3230: Time: 0.10346865653991699, Total Reward: 101.04232616550055, Q Loss: 2943.338249206543, Actor Loss: -1764.7872161865234
Episode 3231: Time: 0.21584534645080566, Total Reward: 222.39611091558882, Q Loss: 5744.726898193359, Actor Loss: -3801.593734741211
Episode 3232: Time: 0.12089896202087402, Total Reward: 119.20297180872626, Q Loss: 2592.0771255493164, Actor Loss: -2103.5962524414062
Episode 3233: Time: 0.12128376960754395, Total Reward: 118.82356469188144, Q Loss: 2931.5266876220703, Actor Loss: -2118.5472717285156
Episode 3234: Time: 0.3283882141113281, Total Reward: 343.44665209085935, Q Loss: 9110.930114746094, Actor Loss: -6000.478424072266
Episode 3235: Time: 0.25893425941467285, Total Reward: 267.03406369411516, Q Loss: 7415.752822875977, Actor Loss: -4709.468765258789
Episode 3236: Time: 0.3275914192199707, Total Reward: 342.88808029524046, Q Loss: 8842.080322265625, Actor Loss: -5797.627304077148
Episode 3237: Time: 0.233245849609375, Total Reward: 239.99370885867765, Q Loss: 6164.829559326172, Actor Loss: -4163.233871459961
Episode 3238: Time: 0.07781171798706055, Total Reward: 72.77004892785078, Q Loss: 2019.8953857421875, Actor Loss: -1330.3278579711914
Episode 3239: Time: 0.46527767181396484, Total Reward: 491.4301598608144, Q Loss: 12687.13208770752, Actor Loss: -8373.581077575684
Episode 3240: Time: 0.11252188682556152, Total Reward: 110.43470475010534, Q Loss: 2876.69766998291, Actor Loss: -2024.9716186523438
Episode 3241: Time: 0.31171417236328125, Total Reward: 323.73713650909906, Q Loss: 8808.620712280273, Actor Loss: -5653.528694152832
Episode 3242: Time: 0.2429649829864502, Total Reward: 249.84163333744974, Q Loss: 6515.165733337402, Actor Loss: -4366.89030456543
Episode 3243: Time: 0.16386866569519043, Total Reward: 166.60478070017083, Q Loss: 4470.062599182129, Actor Loss: -2868.9667205810547

Episode 3244: Time: 0.1929948329925537, Total Reward: 194.35676172416217, Q Loss: 5242.494979858398, Actor Loss: -3540.6963500976562
Episode 3245: Time: 0.1901869773864746, Total Reward: 192.85959785571995, Q Loss: 5725.4818115234375, Actor Loss: -3424.7967681884766
Episode 3246: Time: 0.21602153778076172, Total Reward: 221.4216609912079, Q Loss: 6944.7025146484375, Actor Loss: -3951.472900390625
Episode 3247: Time: 0.29412269592285156, Total Reward: 302.8392099093531, Q Loss: 9298.592468261719, Actor Loss: -5284.974685668945
Episode 3248: Time: 0.3026914596557617, Total Reward: 314.4998339587377, Q Loss: 8356.783683776855, Actor Loss: -5570.990951538086
Episode 3249: Time: 0.12952876091003418, Total Reward: 128.73326500546767, Q Loss: 3130.657730102539, Actor Loss: -2301.4227600097656
Episode 3250: Time: 0.32485198974609375, Total Reward: 333.8701992435039, Q Loss: 8873.942459106445, Actor Loss: -5822.569152832031
Episode 3251: Time: 0.09555983543395996, Total Reward: 91.75947466282094, Q Loss: 2582.118423461914, Actor Loss: -1762.2193603515625
Episode 3252: Time: 0.26773619651794434, Total Reward: 277.7725969063816, Q Loss: 7236.654823303223, Actor Loss: -4940.10823059082
Episode 3253: Time: 0.17239618301391602, Total Reward: 175.53391926165432, Q Loss: 5281.780059814453, Actor Loss: -3152.070526123047
Episode 3254: Time: 0.26729536056518555, Total Reward: 277.05448913247085, Q Loss: 8656.676727294922, Actor Loss: -4973.6488037109375
Episode 3255: Time: 0.1298229694366455, Total Reward: 128.63529589798503, Q Loss: 3493.261260986328, Actor Loss: -2399.7100524902344
Episode 3256: Time: 0.22520661354064941, Total Reward: 229.2865650254538, Q Loss: 6393.8145751953125, Actor Loss: -4264.491455078125
Episode 3257: Time: 0.19800996780395508, Total Reward: 203.54839935527664, Q Loss: 5202.33757019043, Actor Loss: -3715.8597412109375
Episode 3258: Time: 0.29359960556030273, Total Reward: 306.13902012583515, Q Loss: 8001.117790222168, Actor Loss: -5490.07746887207
Episode 3259: Time: 0.1723620891571045, Total Reward: 176.0506182712088, Q Loss: 4722.519477844238, Actor Loss: -3249.7326049804688
Episode 3260: Time: 0.5942480564117432, Total Reward: 631.1139768763234, Q Loss: 16976.681434631348, Actor Loss: -11026.363327026367
Episode 3261: Time: 0.09516382217407227, Total Reward: 91.18902068135297, Q Loss: 3042.6089935302734, Actor Loss: -1782.5253601074219
Episode 3262: Time: 0.1900629997253418, Total Reward: 193.7024027872074, Q Loss: 5801.488708496094, Actor Loss: -3551.848419189453
Episode 3263: Time: 0.25919628143310547, Total Reward: 266.32701575768124, Q Loss: 8227.618324279785, Actor Loss: -4822.041244506836
Episode 3264: Time: 0.13805580139160156, Total Reward: 137.84230499682533, Q Loss: 4111.772018432617, Actor Loss: -2728.1489868164062
Episode 3265: Time: 0.19041776657104492, Total Reward: 191.6220405288648, Q Loss: 5613.6348876953125, Actor Loss: -3632.7075958251953
Episode 3266: Time: 0.4739818572998047, Total Reward: 501.8868853555675, Q Loss: 12843.062110900879, Actor Loss: -8853.29997253418
Episode 3267: Time: 0.12041568756103516, Total Reward: 119.41291367236609, Q Loss: 3457.8107528686523, Actor Loss: -2337.016616821289
Episode 3268: Time: 0.20695972442626953, Total Reward: 212.96582356125694, Q Loss: 6250.377670288086, Actor Loss: -3810.2245330810547
Episode 3269: Time: 0.07777571678161621, Total Reward: 72.69785524111943, Q Loss: 1959.6161499023438, Actor Loss: -1373.4403228759766
Episode 3270: Time: 0.6016480922698975, Total Reward: 639.8185639624303, Q Loss: 17567.967010498047, Actor Loss: -11357.984344482422
Episode 3271: Time: 0.24991416931152344, Total Reward: 258.6109507297783, Q Loss: 8100.083724975586, Actor Loss: -4712.9637451171875

Episode 3272: Time: 0.08660292625427246, Total Reward: 82.29056562898728, Q Loss: 2666.4539489746094, Actor Loss: -1630.0371856689453
Episode 3273: Time: 0.2066173553466797, Total Reward: 212.0822824679372, Q Loss: 5991.4111328125, Actor Loss: -3933.0796813964844
Episode 3274: Time: 0.29245662689208984, Total Reward: 305.7197179774506, Q Loss: 10506.863403320312, Actor Loss: -5522.24739074707
Episode 3275: Time: 0.13788819313049316, Total Reward: 137.69676769453528, Q Loss: 4126.056259155273, Actor Loss: -2621.769821166992
Episode 3276: Time: 0.2416374683380127, Total Reward: 247.30760462839447, Q Loss: 7436.010307312012, Actor Loss: -4578.94465637207
Episode 3277: Time: 0.23375844955444336, Total Reward: 240.8736007499075, Q Loss: 6881.254745483398, Actor Loss: -4384.380294799805
Episode 3278: Time: 0.22448325157165527, Total Reward: 230.86401964092533, Q Loss: 6648.923156738281, Actor Loss: -4262.860794067383
Episode 3279: Time: 0.1811234951019287, Total Reward: 183.31330924426052, Q Loss: 4949.766387939453, Actor Loss: -3459.782455444336
Episode 3280: Time: 0.13827872276306152, Total Reward: 137.72858483122565, Q Loss: 4225.764373779297, Actor Loss: -2557.1998901367188
Episode 3281: Time: 0.22403287887573242, Total Reward: 231.62341918680337, Q Loss: 6481.8143310546875, Actor Loss: -4272.943588256836
Episode 3282: Time: 0.22445106506347656, Total Reward: 230.57218846912846, Q Loss: 6674.607391357422, Actor Loss: -4409.026550292969
Episode 3283: Time: 0.38776540756225586, Total Reward: 409.04377019115384, Q Loss: 11890.116355895996, Actor Loss: -7344.541366577148
Episode 3284: Time: 0.21599912643432617, Total Reward: 220.98194439278643, Q Loss: 6434.546325683594, Actor Loss: -4107.531097412109
Episode 3285: Time: 0.18192005157470703, Total Reward: 184.1826334655368, Q Loss: 5323.059356689453, Actor Loss: -3547.192672729492
Episode 3286: Time: 0.20787358283996582, Total Reward: 212.39380633288647, Q Loss: 5970.519813537598, Actor Loss: -3904.4290618896484
Episode 3287: Time: 0.3454430103302002, Total Reward: 359.78010648882395, Q Loss: 10213.646545410156, Actor Loss: -6750.0013427734375
Episode 3288: Time: 0.2850606441497803, Total Reward: 296.4633829441208, Q Loss: 7838.381408691406, Actor Loss: -5464.981979370117
Episode 3289: Time: 0.19855475425720215, Total Reward: 203.20135438501447, Q Loss: 6474.184188842773, Actor Loss: -3799.544937133789
Episode 3290: Time: 0.07843255996704102, Total Reward: 72.70605353875334, Q Loss: 1966.3477020263672, Actor Loss: -1429.5714492797852
Episode 3291: Time: 0.2505037784576416, Total Reward: 257.42602984465657, Q Loss: 8135.431617736816, Actor Loss: -4818.633987426758
Episode 3292: Time: 0.2504739761352539, Total Reward: 258.82457406647524, Q Loss: 6438.971343994141, Actor Loss: -4899.252578735352
Episode 3293: Time: 0.25032472610473633, Total Reward: 256.98707714048504, Q Loss: 6883.81071472168, Actor Loss: -4708.951904296875
Episode 3294: Time: 0.464846134185791, Total Reward: 492.1216392829166, Q Loss: 13963.314880371094, Actor Loss: -8974.960037231445
Episode 3295: Time: 0.30181050300598145, Total Reward: 315.0250226657303, Q Loss: 8153.165664672852, Actor Loss: -5937.755874633789
Episode 3296: Time: 0.06926202774047852, Total Reward: 63.23517710844396, Q Loss: 1781.583724975586, Actor Loss: -1354.3214416503906
Episode 3297: Time: 0.1819310188293457, Total Reward: 183.96334423026084, Q Loss: 4679.4400634765625, Actor Loss: -3462.9031829833984
Episode 3298: Time: 0.3454744815826416, Total Reward: 361.1775551086964, Q Loss: 11539.939544677734, Actor Loss: -6608.354476928711
Episode 3299: Time: 0.27645254135131836, Total Reward: 286.8829874448381, Q Loss: 7494.1076736450195, Actor Loss: -5405.244491577148

Validation Mean: 539.9930986331442, Validation Std: 227.62351941674083
saving model
Episode 3300: Time: 0.37519049644470215, Total Reward: 369.00920585851475, Q Loss: 10825.83822631836, Actor Loss: -6969.943634033203
Episode 3301: Time: 0.19974517822265625, Total Reward: 201.11304042275475, Q Loss: 6044.660415649414, Actor Loss: -3862.7020568847656
Episode 3302: Time: 0.15614771842956543, Total Reward: 157.14272862057544, Q Loss: 4934.723045349121, Actor Loss: -3058.622589111328
Episode 3303: Time: 0.25107502937316895, Total Reward: 258.6944043761663, Q Loss: 7438.748023986816, Actor Loss: -4902.237579345703
Episode 3304: Time: 0.2676980495452881, Total Reward: 277.4998694755436, Q Loss: 7882.279708862305, Actor Loss: -5177.519912719727
Episode 3305: Time: 0.2506542205810547, Total Reward: 259.13431356661505, Q Loss: 8291.111083984375, Actor Loss: -4980.1201171875
Episode 3306: Time: 0.16330313682556152, Total Reward: 166.30781249283325, Q Loss: 5441.986015319824, Actor Loss: -3154.898483276367
Episode 3307: Time: 0.35284948348999023, Total Reward: 369.1810008444106, Q Loss: 11737.280670166016, Actor Loss: -7028.438323974609
Episode 3308: Time: 0.190171480178833, Total Reward: 191.43324711852705, Q Loss: 6079.250244140625, Actor Loss: -3800.845230102539
Episode 3309: Time: 0.21578741073608398, Total Reward: 219.83925557739138, Q Loss: 6645.321517944336, Actor Loss: -4294.522155761719
Episode 3310: Time: 0.36502575874328613, Total Reward: 378.02148103467084, Q Loss: 12127.452354431152, Actor Loss: -7133.856842041016
Episode 3311: Time: 0.35495948791503906, Total Reward: 371.5125153508031, Q Loss: 10966.795600891113, Actor Loss: -6860.6744384765625
Episode 3312: Time: 0.32829737663269043, Total Reward: 342.7204067977919, Q Loss: 9844.122009277344, Actor Loss: -6404.95182800293
Episode 3313: Time: 0.17330312728881836, Total Reward: 172.49065414383617, Q Loss: 5736.133857727051, Actor Loss: -3432.931671142578
Episode 3314: Time: 0.41405510902404785, Total Reward: 435.0978447354606, Q Loss: 13737.460372924805, Actor Loss: -8244.673858642578
Episode 3315: Time: 0.20691537857055664, Total Reward: 212.29832864793192, Q Loss: 6311.1965408325195, Actor Loss: -4131.537048339844
Episode 3316: Time: 0.22440052032470703, Total Reward: 230.3031390825036, Q Loss: 6392.112380981445, Actor Loss: -4445.893524169922
Episode 3317: Time: 0.3288149833679199, Total Reward: 342.05893089324246, Q Loss: 10478.200073242188, Actor Loss: -6682.79216003418
Episode 3318: Time: 0.22534966468811035, Total Reward: 230.74240270376887, Q Loss: 6423.105484008789, Actor Loss: -4603.312057495117
Episode 3319: Time: 0.14661121368408203, Total Reward: 147.5948109651973, Q Loss: 4501.418075561523, Actor Loss: -3013.7619018554688
Episode 3320: Time: 0.27627038955688477, Total Reward: 286.73228250368356, Q Loss: 8767.802505493164, Actor Loss: -5491.135009765625
Episode 3321: Time: 0.12952256202697754, Total Reward: 128.07217101328524, Q Loss: 4151.854339599609, Actor Loss: -2627.4676055908203
Episode 3322: Time: 0.3708486557006836, Total Reward: 388.8612976761917, Q Loss: 11175.040748596191, Actor Loss: -7353.487213134766
Episode 3323: Time: 0.24157285690307617, Total Reward: 247.93819085309806, Q Loss: 8632.939682006836, Actor Loss: -4840.228591918945
Episode 3324: Time: 0.2501192092895508, Total Reward: 258.259297485036, Q Loss: 8445.31615447998, Actor Loss: -5160.757629394531
Episode 3325: Time: 0.21572494506835938, Total Reward: 221.62434944107068, Q Loss: 7752.574356079102, Actor Loss: -4411.426330566406
Episode 3326: Time: 0.2854177951812744, Total Reward: 295.07460780859367, Q Loss: 10282.230056762695, Actor Loss: -5618.857498168945

Episode 3327: Time: 0.19835782051086426, Total Reward: 203.19986371692926, Q Loss: 6286.117126464844, Actor Loss: -4078.5530395507812
Episode 3328: Time: 0.2503213882446289, Total Reward: 258.866193721704, Q Loss: 8051.855239868164, Actor Loss: -4988.676544189453
Episode 3329: Time: 0.2594642639160156, Total Reward: 268.00421965573906, Q Loss: 9069.763168334961, Actor Loss: -5231.727935791016
Episode 3330: Time: 0.23248863220214844, Total Reward: 240.47648928320785, Q Loss: 7510.022308349609, Actor Loss: -4679.455780029297
Episode 3331: Time: 0.3524439334869385, Total Reward: 370.6799250447426, Q Loss: 12000.026779174805, Actor Loss: -7142.838333129883
Episode 3332: Time: 0.24976086616516113, Total Reward: 258.6693161890155, Q Loss: 8121.77294921875, Actor Loss: -5249.175140380859
Episode 3333: Time: 0.2757241725921631, Total Reward: 283.83876574668716, Q Loss: 9166.167388916016, Actor Loss: -5713.221466064453
Episode 3334: Time: 0.3534977436065674, Total Reward: 370.22722207480535, Q Loss: 11665.060516357422, Actor Loss: -7117.730773925781
Episode 3335: Time: 0.3962399959564209, Total Reward: 416.8665873805635, Q Loss: 13953.745101928711, Actor Loss: -8109.010437011719
Episode 3336: Time: 0.2501695156097412, Total Reward: 257.47427502685485, Q Loss: 8590.636367797852, Actor Loss: -5045.818511962891
Episode 3337: Time: 0.1979973316192627, Total Reward: 202.94804227542065, Q Loss: 6674.573684692383, Actor Loss: -4123.047744750977
Episode 3338: Time: 0.18094396591186523, Total Reward: 184.23159832294155, Q Loss: 6297.645866394043, Actor Loss: -3779.115737915039
Episode 3339: Time: 0.2756977081298828, Total Reward: 285.90130816337694, Q Loss: 9521.165298461914, Actor Loss: -5769.883148193359
Episode 3340: Time: 0.3095686435699463, Total Reward: 324.4449586236639, Q Loss: 10049.684005737305, Actor Loss: -6519.965591430664
Episode 3341: Time: 0.21610283851623535, Total Reward: 221.36615808024155, Q Loss: 7286.413330078125, Actor Loss: -4535.2332763671875
Episode 3342: Time: 0.25092315673828125, Total Reward: 258.9298328943838, Q Loss: 8174.640853881836, Actor Loss: -5117.030197143555
Episode 3343: Time: 0.11261725425720215, Total Reward: 110.27476023529447, Q Loss: 3690.0479583740234, Actor Loss: -2278.188278198242
Episode 3344: Time: 0.23323655128479004, Total Reward: 239.6796145264135, Q Loss: 8068.477676391602, Actor Loss: -4864.966522216797
Episode 3345: Time: 0.1894521713256836, Total Reward: 192.95690820975545, Q Loss: 5843.963668823242, Actor Loss: -3911.982147216797
Episode 3346: Time: 0.27579689025878906, Total Reward: 285.65056848671037, Q Loss: 9661.257064819336, Actor Loss: -5811.407302856445
Episode 3347: Time: 0.1379547119140625, Total Reward: 137.75727750023944, Q Loss: 3838.369827270508, Actor Loss: -2817.520034790039
Episode 3348: Time: 0.3108334541320801, Total Reward: 323.3513347185955, Q Loss: 8798.145751953125, Actor Loss: -6537.511627197266
Episode 3349: Time: 0.3438596725463867, Total Reward: 362.44498761990855, Q Loss: 11376.24545288086, Actor Loss: -7154.673538208008
Episode 3350: Time: 0.28437209129333496, Total Reward: 295.8176752672143, Q Loss: 9758.982452392578, Actor Loss: -5892.742263793945
Episode 3351: Time: 0.22425508499145508, Total Reward: 229.94322312491465, Q Loss: 7678.547866821289, Actor Loss: -4790.755584716797
Episode 3352: Time: 0.20667219161987305, Total Reward: 212.02616818862688, Q Loss: 6667.668647766113, Actor Loss: -4274.050338745117
Episode 3353: Time: 0.17222309112548828, Total Reward: 174.12127511356388, Q Loss: 4860.6187744140625, Actor Loss: -3615.0284881591797
Episode 3354: Time: 0.16394710540771484, Total Reward: 165.27204337446688, Q Loss: 6597.256698608398, Actor Loss: -3445.6543884277344

Episode 3355: Time: 0.2073652744293213, Total Reward: 212.46006483916386, Q Loss: 7132.366050720215, Actor Loss: -4206.931625366211
Episode 3356: Time: 0.4907970428466797, Total Reward: 520.3481615333845, Q Loss: 18533.179946899414, Actor Loss: -10239.023376464844
Episode 3357: Time: 0.3459055423736572, Total Reward: 360.3525738883906, Q Loss: 12341.98715209961, Actor Loss: -7374.427917480469
Episode 3358: Time: 0.2187328338623047, Total Reward: 222.0764684595718, Q Loss: 7179.13826751709, Actor Loss: -4511.12971496582
Episode 3359: Time: 0.24331903457641602, Total Reward: 248.940165227752, Q Loss: 7565.463233947754, Actor Loss: -5074.83056640625
Episode 3360: Time: 0.2510695457458496, Total Reward: 258.6314196275664, Q Loss: 9664.29721069336, Actor Loss: -5341.539138793945
Episode 3361: Time: 0.27666807174682617, Total Reward: 287.4468653097763, Q Loss: 10152.528427124023, Actor Loss: -5867.743423461914
Episode 3362: Time: 0.12981319427490234, Total Reward: 128.37467569066996, Q Loss: 4826.002899169922, Actor Loss: -2849.5518951416016
Episode 3363: Time: 0.38858985900878906, Total Reward: 407.91671433296966, Q Loss: 12933.532272338867, Actor Loss: -8214.897552490234
Episode 3364: Time: 0.1560530662536621, Total Reward: 156.60988740740882, Q Loss: 5214.782043457031, Actor Loss: -3211.091064453125
Episode 3365: Time: 0.17682766914367676, Total Reward: 175.35962090733585, Q Loss: 6372.568328857422, Actor Loss: -3690.0338287353516
Episode 3366: Time: 0.08653545379638672, Total Reward: 82.19715987468032, Q Loss: 3026.055374145508, Actor Loss: -1814.9037628173828
Episode 3367: Time: 0.2339320182800293, Total Reward: 239.9342211589839, Q Loss: 8353.808700561523, Actor Loss: -5090.840637207031
Episode 3368: Time: 0.2345428466796875, Total Reward: 240.90294715474647, Q Loss: 7976.126663208008, Actor Loss: -4898.958648681641
Episode 3369: Time: 0.07802271842956543, Total Reward: 72.31868073648191, Q Loss: 2782.3392181396484, Actor Loss: -1617.3955078125
Episode 3370: Time: 0.2507357597351074, Total Reward: 258.0218131840263, Q Loss: 9163.120193481445, Actor Loss: -5398.909774780273
Episode 3371: Time: 0.22498226165771484, Total Reward: 230.25027814869688, Q Loss: 7762.16943359375, Actor Loss: -4813.629547119141
Episode 3372: Time: 0.18123221397399902, Total Reward: 184.14849998786642, Q Loss: 6138.146942138672, Actor Loss: -3917.9381713867188
Episode 3373: Time: 0.12147641181945801, Total Reward: 119.59872030338822, Q Loss: 4715.069778442383, Actor Loss: -2608.9471588134766
Episode 3374: Time: 0.1637256145477295, Total Reward: 165.70916558747143, Q Loss: 5730.1981201171875, Actor Loss: -3555.5843658447266
Episode 3375: Time: 0.26883816719055176, Total Reward: 276.8596257540161, Q Loss: 8744.092041015625, Actor Loss: -5658.65153503418
Episode 3376: Time: 0.23322510719299316, Total Reward: 240.6889059741694, Q Loss: 9299.48501586914, Actor Loss: -5094.502944946289
Episode 3377: Time: 0.3293137550354004, Total Reward: 342.5567931203483, Q Loss: 12071.656188964844, Actor Loss: -7191.919219970703
Episode 3378: Time: 0.27719640731811523, Total Reward: 286.61993689242735, Q Loss: 9711.032775878906, Actor Loss: -5818.545364379883
Episode 3379: Time: 0.2251138687133789, Total Reward: 231.48690300147481, Q Loss: 8291.866516113281, Actor Loss: -4812.7518310546875
Episode 3380: Time: 0.21656179428100586, Total Reward: 221.2087548626635, Q Loss: 8151.757247924805, Actor Loss: -4643.225967407227
Episode 3381: Time: 0.2083749771118164, Total Reward: 212.7264124716307, Q Loss: 7790.215560913086, Actor Loss: -4640.667495727539
Episode 3382: Time: 0.25169920921325684, Total Reward: 257.8545582651289, Q Loss: 10218.608428955078, Actor Loss: -5390.179443359375

Episode 3383: Time: 0.15571093559265137, Total Reward: 157.28458477412184, Q Loss: 5052.481704711914, Actor Loss: -3362.950454711914
Episode 3384: Time: 0.406463623046875, Total Reward: 426.94084233353686, Q Loss: 15129.78793334961, Actor Loss: -8793.190185546875
Episode 3385: Time: 0.2251911163330078, Total Reward: 231.39104710781547, Q Loss: 8307.569625854492, Actor Loss: -4896.809906005859
Episode 3386: Time: 0.2862989902496338, Total Reward: 295.14708383051436, Q Loss: 9651.022155761719, Actor Loss: -6097.190078735352
Episode 3387: Time: 0.2509138584136963, Total Reward: 256.83888162928986, Q Loss: 9318.849624633789, Actor Loss: -5529.801254272461
Episode 3388: Time: 0.30316781997680664, Total Reward: 315.27362678398424, Q Loss: 11208.375045776367, Actor Loss: -6704.511337280273
Episode 3389: Time: 0.42325687408447266, Total Reward: 444.30377703597713, Q Loss: 15147.040283203125, Actor Loss: -9228.862030029297
Episode 3390: Time: 0.12190771102905273, Total Reward: 119.160256866698, Q Loss: 5679.651412963867, Actor Loss: -2573.607711791992
Episode 3391: Time: 0.23401951789855957, Total Reward: 239.73306267308192, Q Loss: 9871.751525878906, Actor Loss: -5238.774185180664
Episode 3392: Time: 0.1736893653869629, Total Reward: 173.98233328719658, Q Loss: 6768.593643188477, Actor Loss: -3844.497543334961
Episode 3393: Time: 0.19121909141540527, Total Reward: 193.32833245021988, Q Loss: 6343.897705078125, Actor Loss: -4286.218795776367
Episode 3394: Time: 0.2783517837524414, Total Reward: 284.4903600718635, Q Loss: 10288.754333496094, Actor Loss: -6037.375198364258
Episode 3395: Time: 0.18262982368469238, Total Reward: 184.57653737275297, Q Loss: 7387.219833374023, Actor Loss: -4097.1865234375
Episode 3396: Time: 0.2603423595428467, Total Reward: 269.12265358931086, Q Loss: 8327.218856811523, Actor Loss: -5650.863967895508
Episode 3397: Time: 0.11327934265136719, Total Reward: 110.27172314069905, Q Loss: 3813.0252990722656, Actor Loss: -2553.460678100586
Episode 3398: Time: 0.2684786319732666, Total Reward: 277.5221082614103, Q Loss: 9963.629623413086, Actor Loss: -5958.412506103516
Episode 3399: Time: 0.22594928741455078, Total Reward: 229.32935748366504, Q Loss: 8119.160758972168, Actor Loss: -4862.321395874023
Validation Mean: 628.6413506801913, Validation Std: 244.30382374246565
saving model
Episode 3400: Time: 0.12286376953125, Total Reward: 119.50892155342086, Q Loss: 4636.815139770508, Actor Loss: -2699.246078491211
Episode 3401: Time: 0.20807838439941406, Total Reward: 212.2627652100882, Q Loss: 9153.746170043945, Actor Loss: -4641.289138793945
Episode 3402: Time: 0.12149763107299805, Total Reward: 119.63923223029776, Q Loss: 4476.8743896484375, Actor Loss: -2758.288589477539
Episode 3403: Time: 0.3681368827819824, Total Reward: 378.5945058021507, Q Loss: 12975.675735473633, Actor Loss: -7952.917098999023
Episode 3404: Time: 0.303511381149292, Total Reward: 314.4327680018274, Q Loss: 12562.106369018555, Actor Loss: -6574.891143798828
Episode 3405: Time: 0.33736371994018555, Total Reward: 352.62337958365606, Q Loss: 12128.23013305664, Actor Loss: -7666.161468505859
Episode 3406: Time: 0.15590524673461914, Total Reward: 155.89547205774502, Q Loss: 6348.734512329102, Actor Loss: -3431.590805053711
Episode 3407: Time: 0.26840901374816895, Total Reward: 276.86408905581686, Q Loss: 9009.509353637695, Actor Loss: -5885.157577514648
Episode 3408: Time: 0.26822447776794434, Total Reward: 277.56987516401443, Q Loss: 10726.988006591797, Actor Loss: -5951.2847900390625
Episode 3409: Time: 0.30370259284973145, Total Reward: 315.674446950174, Q Loss: 10880.809341430664, Actor Loss: -6767.077209472656

Episode 3410: Time: 0.39974117279052734, Total Reward: 417.7266184576229, Q Loss: 16978.70408630371, Actor Loss: -8864.271881103516
Episode 3411: Time: 0.2517416477203369, Total Reward: 259.4666559002641, Q Loss: 10088.399520874023, Actor Loss: -5720.751022338867
Episode 3412: Time: 0.20003914833068848, Total Reward: 202.485462555301, Q Loss: 8147.21369934082, Actor Loss: -4551.831481933594
Episode 3413: Time: 0.3558962345123291, Total Reward: 371.2189744105234, Q Loss: 14288.861907958984, Actor Loss: -7881.079055786133
Episode 3414: Time: 0.28649401664733887, Total Reward: 296.36523624858074, Q Loss: 12541.947021484375, Actor Loss: -6541.022689819336
Episode 3415: Time: 0.19067955017089844, Total Reward: 194.04849290562584, Q Loss: 8112.387710571289, Actor Loss: -4261.2122802734375
Episode 3416: Time: 0.07896971702575684, Total Reward: 72.77767353376639, Q Loss: 3266.752227783203, Actor Loss: -1658.41845703125
Episode 3417: Time: 0.07836246490478516, Total Reward: 72.42298826010311, Q Loss: 3176.9907989501953, Actor Loss: -1651.3834686279297
Episode 3418: Time: 0.5796928405761719, Total Reward: 612.9680530535115, Q Loss: 23567.759338378906, Actor Loss: -13065.670593261719
Episode 3419: Time: 0.13006830215454102, Total Reward: 128.7283963819548, Q Loss: 5514.866851806641, Actor Loss: -2931.588150024414
Episode 3420: Time: 0.3636057376861572, Total Reward: 379.4229492700561, Q Loss: 13894.56950378418, Actor Loss: -8431.476699829102
Episode 3421: Time: 0.24306607246398926, Total Reward: 248.42137722377893, Q Loss: 11236.41763305664, Actor Loss: -5453.858673095703
Episode 3422: Time: 0.30423998832702637, Total Reward: 312.657190052824, Q Loss: 14407.140640258789, Actor Loss: -6969.986419677734
Episode 3423: Time: 0.5113010406494141, Total Reward: 536.7500860506532, Q Loss: 19957.88671875, Actor Loss: -11636.185150146484
Episode 3424: Time: 0.28679418563842773, Total Reward: 295.8074586928306, Q Loss: 12366.994277954102, Actor Loss: -6590.204193115234
Episode 3425: Time: 0.2526130676269531, Total Reward: 258.85204061135215, Q Loss: 10759.564239501953, Actor Loss: -5645.588531494141
Episode 3426: Time: 0.2172226905822754, Total Reward: 221.26224594627968, Q Loss: 8683.223007202148, Actor Loss: -4938.349273681641
Episode 3427: Time: 0.20885777473449707, Total Reward: 212.3545369013955, Q Loss: 9508.8173828125, Actor Loss: -4853.989364624023
Episode 3428: Time: 0.28618574142456055, Total Reward: 297.1722553379142, Q Loss: 12193.954498291016, Actor Loss: -6731.904449462891
Episode 3429: Time: 0.2081148624420166, Total Reward: 212.48340008761457, Q Loss: 8578.965682983398, Actor Loss: -4692.256317138672
Episode 3430: Time: 0.09537482261657715, Total Reward: 91.49500261846444, Q Loss: 4164.857986450195, Actor Loss: -2164.0294799804688
Episode 3431: Time: 0.23506903648376465, Total Reward: 240.58209030721255, Q Loss: 10403.16928100586, Actor Loss: -5245.335556030273
Episode 3432: Time: 0.1647806167602539, Total Reward: 165.80766019054062, Q Loss: 7402.028274536133, Actor Loss: -3825.6299743652344
Episode 3433: Time: 0.294996976852417, Total Reward: 305.5937713701017, Q Loss: 12039.923202514648, Actor Loss: -6615.040435791016
Episode 3434: Time: 0.1906890869140625, Total Reward: 191.83759743487062, Q Loss: 8505.560073852539, Actor Loss: -4386.995864868164
Episode 3435: Time: 0.2256627082824707, Total Reward: 230.84835297222034, Q Loss: 8616.497634887695, Actor Loss: -5282.24739074707
Episode 3436: Time: 0.24299216270446777, Total Reward: 249.34827726427804, Q Loss: 10550.684295654297, Actor Loss: -5691.536468505859
Episode 3437: Time: 0.3032643795013428, Total Reward: 313.98767926428576, Q Loss: 12270.12484741211, Actor Loss: -6871.537902832031

Episode 3438: Time: 0.20795035362243652, Total Reward: 212.34990426951998, Q Loss: 8406.65005493164, Actor Loss: -4718.631530761719
Episode 3439: Time: 0.3285391330718994, Total Reward: 343.36443085020863, Q Loss: 12847.564140319824, Actor Loss: -7680.413864135742
Episode 3440: Time: 0.4752774238586426, Total Reward: 500.43935523286115, Q Loss: 19373.167068481445, Actor Loss: -11064.518081665039
Episode 3441: Time: 0.11252069473266602, Total Reward: 110.14139088540936, Q Loss: 6107.7288818359375, Actor Loss: -2685.8724670410156
Episode 3442: Time: 0.20006322860717773, Total Reward: 203.00347538498525, Q Loss: 8400.513534545898, Actor Loss: -4689.714157104492
Episode 3443: Time: 0.2250661849975586, Total Reward: 229.92472696028184, Q Loss: 10049.295776367188, Actor Loss: -5221.201843261719
Episode 3444: Time: 0.1298673152923584, Total Reward: 128.6649994570588, Q Loss: 4799.306343078613, Actor Loss: -3016.4829864501953
Episode 3445: Time: 0.22524809837341309, Total Reward: 230.21763600437788, Q Loss: 8616.249954223633, Actor Loss: -5322.328048706055
Episode 3446: Time: 0.2424163818359375, Total Reward: 246.27884618125438, Q Loss: 9522.143569946289, Actor Loss: -5573.163421630859
Episode 3447: Time: 0.1640329360961914, Total Reward: 165.58361750199893, Q Loss: 7418.205154418945, Actor Loss: -3911.1541595458984
Episode 3448: Time: 0.24202346801757812, Total Reward: 248.33822244190696, Q Loss: 11809.954818725586, Actor Loss: -5694.478622436523
Episode 3449: Time: 0.1811385154724121, Total Reward: 184.91532434218445, Q Loss: 7075.327011108398, Actor Loss: -4262.921905517578
Episode 3450: Time: 0.10407757759094238, Total Reward: 99.90665790153751, Q Loss: 4372.282180786133, Actor Loss: -2456.9652099609375
Episode 3451: Time: 0.18107843399047852, Total Reward: 183.08657680730832, Q Loss: 7784.914962768555, Actor Loss: -4191.404312133789
Episode 3452: Time: 0.05234122276306152, Total Reward: 43.99618293900395, Q Loss: 2660.2740478515625, Actor Loss: -1246.0087127685547
Episode 3453: Time: 0.2852206230163574, Total Reward: 296.51890134972064, Q Loss: 12357.886459350586, Actor Loss: -6722.907363891602
Episode 3454: Time: 0.35384273529052734, Total Reward: 370.2556146202051, Q Loss: 14647.408493041992, Actor Loss: -8216.569290161133
Episode 3455: Time: 0.2505831718444824, Total Reward: 257.4068589142483, Q Loss: 9787.215408325195, Actor Loss: -5905.411651611328
Episode 3456: Time: 0.13824796676635742, Total Reward: 138.02177729863882, Q Loss: 5216.436004638672, Actor Loss: -3283.7515411376953
Episode 3457: Time: 0.21581792831420898, Total Reward: 221.144226296266, Q Loss: 8747.193756103516, Actor Loss: -5160.0758056640625
Episode 3458: Time: 0.15472745895385742, Total Reward: 155.8929659804232, Q Loss: 5762.541931152344, Actor Loss: -3458.299545288086
Episode 3459: Time: 0.2239527702331543, Total Reward: 230.07885308225627, Q Loss: 9723.031967163086, Actor Loss: -5349.830383300781
Episode 3460: Time: 0.26628589630126953, Total Reward: 276.4833540421475, Q Loss: 11887.39958190918, Actor Loss: -6276.767761230469
Episode 3461: Time: 0.19780874252319336, Total Reward: 201.51890369895983, Q Loss: 8083.798049926758, Actor Loss: -4746.0224609375
Episode 3462: Time: 0.3097076416015625, Total Reward: 323.37308475290314, Q Loss: 13385.060913085938, Actor Loss: -7444.551895141602
Episode 3463: Time: 0.25817418098449707, Total Reward: 268.15932945131266, Q Loss: 9806.980758666992, Actor Loss: -6227.393951416016
Episode 3464: Time: 0.3444480895996094, Total Reward: 357.21603173244773, Q Loss: 14829.298126220703, Actor Loss: -8259.933792114258
Episode 3465: Time: 0.2673680782318115, Total Reward: 277.48251101287985, Q Loss: 11237.995559692383, Actor Loss: -6389.450332641602

Episode 3466: Time: 0.0863804817199707, Total Reward: 82.43294012127319, Q Loss: 4168.037246704102, Actor Loss: -2104.562057495117
Episode 3467: Time: 0.3267178535461426, Total Reward: 343.33646614998554, Q Loss: 14194.703964233398, Actor Loss: -8069.58464050293
Episode 3468: Time: 0.5239429473876953, Total Reward: 555.6540643219599, Q Loss: 23702.743865966797, Actor Loss: -12715.347274780273
Episode 3469: Time: 0.18923497200012207, Total Reward: 194.4353694627155, Q Loss: 10450.437889099121, Actor Loss: -4593.467300415039
Episode 3470: Time: 0.1639251708984375, Total Reward: 165.9533824631785, Q Loss: 6504.973541259766, Actor Loss: -3877.674057006836
Episode 3471: Time: 0.3184971809387207, Total Reward: 333.7631495381466, Q Loss: 12523.495162963867, Actor Loss: -7463.514938354492
Episode 3472: Time: 0.1462419033050537, Total Reward: 146.91193405982887, Q Loss: 5867.124313354492, Actor Loss: -3529.548370361328
Episode 3473: Time: 0.1383044719696045, Total Reward: 138.1684443488552, Q Loss: 5321.215728759766, Actor Loss: -3414.6234741210938
Episode 3474: Time: 0.1885683536529541, Total Reward: 192.3413002979754, Q Loss: 9864.131927490234, Actor Loss: -4540.937164306641
Episode 3475: Time: 0.4386725425720215, Total Reward: 464.3867164440802, Q Loss: 21598.597381591797, Actor Loss: -10662.604278564453
Episode 3476: Time: 0.25353312492370605, Total Reward: 259.29469998413947, Q Loss: 10374.399398803711, Actor Loss: -6084.569320678711
Episode 3477: Time: 0.2673342227935791, Total Reward: 275.43665279147183, Q Loss: 12683.395050048828, Actor Loss: -6334.909332275391
Episode 3478: Time: 0.21569395065307617, Total Reward: 220.02528597579902, Q Loss: 9060.068115234375, Actor Loss: -5210.960678100586
Episode 3479: Time: 0.335113525390625, Total Reward: 352.407854626818, Q Loss: 17865.341751098633, Actor Loss: -8200.956741333008
Episode 3480: Time: 0.2671642303466797, Total Reward: 277.7605000279206, Q Loss: 11900.272552490234, Actor Loss: -6581.559280395508
Episode 3481: Time: 0.1464838981628418, Total Reward: 146.32522396983305, Q Loss: 6301.119003295898, Actor Loss: -3642.9688568115234
Episode 3482: Time: 0.10371828079223633, Total Reward: 101.0303439330336, Q Loss: 5265.9666748046875, Actor Loss: -2503.9393310546875
Episode 3483: Time: 0.7364964485168457, Total Reward: 780.6223575057138, Q Loss: 33773.134201049805, Actor Loss: -18147.556640625
Episode 3484: Time: 0.10409188270568848, Total Reward: 101.07866433314085, Q Loss: 4279.935302734375, Actor Loss: -2527.2578887939453
Episode 3485: Time: 0.22492313385009766, Total Reward: 229.63224372301076, Q Loss: 10583.360168457031, Actor Loss: -5589.439605712891
Episode 3486: Time: 0.2671506404876709, Total Reward: 277.6216785863663, Q Loss: 12143.609359741211, Actor Loss: -6508.6346435546875
Episode 3487: Time: 0.3953514099121094, Total Reward: 417.39455629152854, Q Loss: 20056.510543823242, Actor Loss: -9910.546768188477
Episode 3488: Time: 0.24906349182128906, Total Reward: 257.1437025774244, Q Loss: 11851.736236572266, Actor Loss: -6342.225006103516
Episode 3489: Time: 0.1973559856414795, Total Reward: 202.90174985777816, Q Loss: 11075.278701782227, Actor Loss: -5007.475280761719
Episode 3490: Time: 0.24086833000183105, Total Reward: 250.2325666633343, Q Loss: 12673.046463012695, Actor Loss: -6002.968338012695
Episode 3491: Time: 0.27493810653686523, Total Reward: 285.6931492841744, Q Loss: 13392.906494140625, Actor Loss: -6820.549835205078
Episode 3492: Time: 0.29198694229125977, Total Reward: 306.23298529342253, Q Loss: 12226.947555541992, Actor Loss: -7390.526748657227
Episode 3493: Time: 0.23267221450805664, Total Reward: 238.22212864426538, Q Loss: 10270.975341796875, Actor Loss: -5934.911712646484

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Episode 3494: Time: 0.22354841232299805, Total Reward: 230.90350498124974, Q
Loss: 10228.326858520508, Actor Loss: -5574.86994934082
Episode 3495: Time: 0.3266947269439697, Total Reward: 343.55576278080986, Q
Loss: 16197.533584594727, Actor Loss: -8267.088455200195
Episode 3496: Time: 0.14621734619140625, Total Reward: 147.1236742561375, Q
Loss: 6182.665168762207, Actor Loss: -3755.7166290283203
Episode 3497: Time: 0.14629626274108887, Total Reward: 146.8978785494495, Q
Loss: 7167.550003051758, Actor Loss: -3530.8226470947266
Episode 3498: Time: 0.24086689949035645, Total Reward: 250.04519776581054, Q
Loss: 11656.579177856445, Actor Loss: -6035.548934936523
Episode 3499: Time: 0.25833868980407715, Total Reward: 268.34001426429376, Q
Loss: 13639.389465332031, Actor Loss: -6504.815124511719
Validation Mean: 548.5400818468636, Validation Std: 244.82236003605308
saving model
Episode 3500: Time: 0.1902761459350586, Total Reward: 192.2908392305401, Q L
oss: 8567.99234008789, Actor Loss: -4798.956924438477
Episode 3501: Time: 0.2405686378479004, Total Reward: 249.6221396346491, Q L
oss: 13008.639297485352, Actor Loss: -6110.488296508789
Episode 3502: Time: 0.21585845947265625, Total Reward: 221.4373710489064, Q
Loss: 10249.219223022461, Actor Loss: -5408.5098876953125
Episode 3503: Time: 0.12054300308227539, Total Reward: 119.41216075850109, Q
Loss: 7032.729431152344, Actor Loss: -2989.7146759033203
Episode 3504: Time: 0.12085247039794922, Total Reward: 119.55174122878921, Q
Loss: 5297.689483642578, Actor Loss: -2996.5787353515625
Episode 3505: Time: 0.33596205711364746, Total Reward: 351.70347599478214, Q
Loss: 15529.7646484375, Actor Loss: -8306.90054321289
Episode 3506: Time: 0.24962115287780762, Total Reward: 257.2173608660745, Q
Loss: 12251.00471496582, Actor Loss: -6298.689849853516
Episode 3507: Time: 0.29186320304870605, Total Reward: 305.3600842639056, Q
Loss: 15554.681396484375, Actor Loss: -7313.506912231445
Episode 3508: Time: 0.3094484806060791, Total Reward: 323.240912586798, Q Lo
ss: 14434.455444335938, Actor Loss: -7848.264465332031
Episode 3509: Time: 0.12128782272338867, Total Reward: 119.26516992148734, Q
Loss: 6038.957214355469, Actor Loss: -2986.9900665283203
Episode 3510: Time: 0.16390132904052734, Total Reward: 163.99461506010383, Q
Loss: 8802.466094970703, Actor Loss: -4086.7748260498047
Episode 3511: Time: 0.20651888847351074, Total Reward: 210.6705568352295, Q
Loss: 10498.87126159668, Actor Loss: -5181.6016845703125
Episode 3512: Time: 0.1291210651397705, Total Reward: 127.98461808257704, Q
Loss: 6091.27458190918, Actor Loss: -3410.380401611328
Episode 3513: Time: 0.21526193618774414, Total Reward: 220.4135402715082, Q
Loss: 9252.456146240234, Actor Loss: -5416.306015014648
Episode 3514: Time: 0.24059271812438965, Total Reward: 249.88971775915905, Q
Loss: 12068.668472290039, Actor Loss: -6114.390670776367
Episode 3515: Time: 0.18858814239501953, Total Reward: 194.23431813514068, Q
Loss: 9445.743148803711, Actor Loss: -4986.410919189453
Episode 3516: Time: 0.12898874282836914, Total Reward: 128.6082873938799, Q
Loss: 6769.037994384766, Actor Loss: -3414.030014038086
Episode 3517: Time: 0.3090214729309082, Total Reward: 323.9812818012991, Q L
oss: 15439.046798706055, Actor Loss: -7924.669448852539
Episode 3518: Time: 0.1035618782043457, Total Reward: 101.1085698984132, Q L
oss: 5635.30419921875, Actor Loss: -2618.522979736328
Episode 3519: Time: 0.26616764068603516, Total Reward: 276.9690495749856, Q
Loss: 12496.715438842773, Actor Loss: -6898.068695068359
Episode 3520: Time: 0.4213895797729492, Total Reward: 445.7894346305676, Q L
oss: 21219.714401245117, Actor Loss: -10609.151596069336
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Episode 3521: Time: 0.2760136127471924, Total Reward: 286.7622565777899, Q Loss: 13885.065795898438, Actor Loss: -7052.751449584961
Episode 3522: Time: 0.266951322555542, Total Reward: 277.3263736504345, Q Loss: 17057.480926513672, Actor Loss: -6935.735610961914
Episode 3523: Time: 0.19782423973083496, Total Reward: 202.4921777401684, Q Loss: 10049.650283813477, Actor Loss: -5012.556060791016
Episode 3524: Time: 0.3344743251800537, Total Reward: 350.9917942494225, Q Loss: 16607.5184173584, Actor Loss: -8615.508346557617
Episode 3525: Time: 0.4202547073364258, Total Reward: 445.96115742119065, Q Loss: 21537.44171142578, Actor Loss: -10710.485458374023
Episode 3526: Time: 0.12862825393676758, Total Reward: 125.74346005785029, Q Loss: 6649.2877197265625, Actor Loss: -3342.7349548339844
Episode 3527: Time: 0.14640355110168457, Total Reward: 146.87907243087886, Q Loss: 8108.236145019531, Actor Loss: -3705.8818359375
Episode 3528: Time: 0.29242777824401855, Total Reward: 304.8491115832345, Q Loss: 16216.767181396484, Actor Loss: -7531.331527709961
Episode 3529: Time: 0.2759249210357666, Total Reward: 286.19214896736895, Q Loss: 13602.286651611328, Actor Loss: -7053.690734863281
Episode 3530: Time: 0.29291486740112305, Total Reward: 304.68837822696145, Q Loss: 15007.248397827148, Actor Loss: -7650.905456542969
Episode 3531: Time: 0.13787198066711426, Total Reward: 138.09188203548484, Q Loss: 7654.279449462891, Actor Loss: -3644.0157318115234
Episode 3532: Time: 0.36969709396362305, Total Reward: 388.4874833980694, Q Loss: 22072.321044921875, Actor Loss: -9487.424270629883
Episode 3533: Time: 0.23228979110717773, Total Reward: 240.51863761771955, Q Loss: 12997.064331054688, Actor Loss: -6003.576904296875
Episode 3534: Time: 0.2494962215423584, Total Reward: 259.302053252903, Q Loss: 11174.782287597656, Actor Loss: -6525.033889770508
Episode 3535: Time: 0.21503329277038574, Total Reward: 220.6632005566001, Q Loss: 12407.948684692383, Actor Loss: -5666.615493774414
Episode 3536: Time: 0.09464812278747559, Total Reward: 91.45924339267572, Q Loss: 4609.236221313477, Actor Loss: -2488.553955078125
Episode 3537: Time: 0.4982001781463623, Total Reward: 529.3786621212747, Q Loss: 24647.770904541016, Actor Loss: -13180.9755859375
Episode 3538: Time: 0.12067461013793945, Total Reward: 117.16274519466596, Q Loss: 6909.0430908203125, Actor Loss: -3099.1511993408203
Episode 3539: Time: 0.22488832473754883, Total Reward: 230.39780728114053, Q Loss: 11889.980484008789, Actor Loss: -5858.952774047852
Episode 3540: Time: 0.14619064331054688, Total Reward: 147.72535410691427, Q Loss: 6507.926376342773, Actor Loss: -3811.1505126953125
Episode 3541: Time: 0.08644509315490723, Total Reward: 81.89354961117952, Q Loss: 4424.2437744140625, Actor Loss: -2282.9141845703125
Episode 3542: Time: 0.22355127334594727, Total Reward: 230.31925629219504, Q Loss: 11174.271865844727, Actor Loss: -5765.687927246094
Episode 3543: Time: 0.206573486328125, Total Reward: 212.54248498828807, Q Loss: 11154.726516723633, Actor Loss: -5396.602996826172
Episode 3544: Time: 0.17180490493774414, Total Reward: 174.25049479197426, Q Loss: 9992.876571655273, Actor Loss: -4537.764144897461
Episode 3545: Time: 0.1892399787902832, Total Reward: 193.69150871771024, Q Loss: 10640.385116577148, Actor Loss: -5012.194259643555
Episode 3546: Time: 0.3954503536224365, Total Reward: 418.29548941427004, Q Loss: 23445.922286987305, Actor Loss: -10486.173095703125
Episode 3547: Time: 0.3187291622161865, Total Reward: 334.3670289586262, Q Loss: 15756.354034423828, Actor Loss: -8429.473724365234
Episode 3548: Time: 0.23232269287109375, Total Reward: 239.7929069986211, Q Loss: 10482.727279663086, Actor Loss: -6023.169784545898

Episode 3549: Time: 0.31793665885925293, Total Reward: 332.89130102262095, Q Loss: 18741.632263183594, Actor Loss: -8475.78857421875
Episode 3550: Time: 0.44651198387145996, Total Reward: 474.61079542025135, Q Loss: 23050.794036865234, Actor Loss: -12033.640640258789
Episode 3551: Time: 0.09468388557434082, Total Reward: 91.97871530449872, Q Loss: 5764.566925048828, Actor Loss: -2458.357620239258
Episode 3552: Time: 0.44801902770996094, Total Reward: 474.043066155678, Q Loss: 24776.716598510742, Actor Loss: -11972.715393066406
Episode 3553: Time: 0.19751667976379395, Total Reward: 201.61983777162365, Q Loss: 10195.923706054688, Actor Loss: -5377.225051879883
Episode 3554: Time: 0.16431188583374023, Total Reward: 166.09452412876848, Q Loss: 8642.993194580078, Actor Loss: -4307.135787963867
Episode 3555: Time: 0.1890251636505127, Total Reward: 194.50091622941775, Q Loss: 10081.570419311523, Actor Loss: -5051.77326965332
Episode 3556: Time: 0.24084019660949707, Total Reward: 249.69402933659015, Q Loss: 13286.377304077148, Actor Loss: -6583.123611450195
Episode 3557: Time: 0.3528003692626953, Total Reward: 370.3593589039773, Q Loss: 17468.060028076172, Actor Loss: -9289.777893066406
Episode 3558: Time: 0.13762402534484863, Total Reward: 137.95732954803674, Q Loss: 6554.033157348633, Actor Loss: -3587.344253540039
Episode 3559: Time: 0.23276519775390625, Total Reward: 237.83715756524984, Q Loss: 12903.80679321289, Actor Loss: -6314.967346191406
Episode 3560: Time: 0.17188358306884766, Total Reward: 174.64356655202178, Q Loss: 11022.448120117188, Actor Loss: -4543.811859130859
Episode 3561: Time: 0.06955337524414062, Total Reward: 63.031679386320015, Q Loss: 3331.6069946289062, Actor Loss: -1805.9130096435547
Episode 3562: Time: 0.28380465507507324, Total Reward: 294.9957600611988, Q Loss: 15019.422485351562, Actor Loss: -7498.135818481445
Episode 3563: Time: 0.3452889919281006, Total Reward: 361.8216198938286, Q Loss: 19467.04067993164, Actor Loss: -9069.26432800293
Episode 3564: Time: 0.1463165283203125, Total Reward: 146.47098187310883, Q Loss: 7374.682800292969, Actor Loss: -3939.6929473876953
Episode 3565: Time: 0.15536928176879883, Total Reward: 157.14276592733228, Q Loss: 8642.984283447266, Actor Loss: -4133.181289672852
Episode 3566: Time: 0.5491485595703125, Total Reward: 583.3942567852058, Q Loss: 30586.87825012207, Actor Loss: -14802.268051147461
Episode 3567: Time: 0.15491151809692383, Total Reward: 157.33696713096617, Q Loss: 8264.971420288086, Actor Loss: -3949.560073852539
Episode 3568: Time: 0.3098757266998291, Total Reward: 320.26304235453614, Q Loss: 18567.229583740234, Actor Loss: -8298.978378295898
Episode 3569: Time: 0.3184030055999756, Total Reward: 334.0100833913167, Q Loss: 18432.236938476562, Actor Loss: -8616.708221435547
Episode 3570: Time: 0.17243599891662598, Total Reward: 174.84118531028835, Q Loss: 10527.67317199707, Actor Loss: -4705.317932128906
Episode 3571: Time: 0.36148953437805176, Total Reward: 380.42588241387847, Q Loss: 19713.027282714844, Actor Loss: -9749.642639160156
Episode 3572: Time: 0.524097204208374, Total Reward: 558.052930359923, Q Loss: 28192.41845703125, Actor Loss: -14087.069061279297
Episode 3573: Time: 0.22414374351501465, Total Reward: 231.13142548187548, Q Loss: 14035.754165649414, Actor Loss: -6099.076202392578
Episode 3574: Time: 0.16319847106933594, Total Reward: 163.80446159683632, Q Loss: 9778.841537475586, Actor Loss: -4545.785491943359
Episode 3575: Time: 0.23277544975280762, Total Reward: 239.88003876882865, Q Loss: 11928.925567626953, Actor Loss: -6284.937271118164
Episode 3576: Time: 0.08613085746765137, Total Reward: 81.86107418583646, Q Loss: 4449.089080810547, Actor Loss: -2353.548828125

Episode 3577: Time: 0.11174869537353516, Total Reward: 109.9717583672641, Q Loss: 5742.339492797852, Actor Loss: -2986.373260498047
Episode 3578: Time: 0.32639551162719727, Total Reward: 342.27624396484464, Q Loss: 18714.329864501953, Actor Loss: -8814.838104248047
Episode 3579: Time: 0.3093414306640625, Total Reward: 322.58504068722186, Q Loss: 18366.591094970703, Actor Loss: -8505.749938964844
Episode 3580: Time: 0.5927298069000244, Total Reward: 630.4051554578938, Q Loss: 35376.87203979492, Actor Loss: -16337.339157104492
Episode 3581: Time: 0.32662224769592285, Total Reward: 341.88878417230217, Q Loss: 21748.295196533203, Actor Loss: -8988.505065917969
Episode 3582: Time: 0.12059617042541504, Total Reward: 119.53611510542225, Q Loss: 6802.567230224609, Actor Loss: -3271.4625549316406
Episode 3583: Time: 0.16368961334228516, Total Reward: 165.49203532883848, Q Loss: 6940.688018798828, Actor Loss: -4430.710067749023
Episode 3584: Time: 0.07760024070739746, Total Reward: 72.32241154461074, Q Loss: 3581.4707641601562, Actor Loss: -2038.290298461914
Episode 3585: Time: 0.18894314765930176, Total Reward: 193.28893859861753, Q Loss: 10822.868270874023, Actor Loss: -5204.709579467773
Episode 3586: Time: 0.4071347713470459, Total Reward: 428.125397588929, Q Loss: 23819.331466674805, Actor Loss: -11229.833450317383
Episode 3587: Time: 0.24989557266235352, Total Reward: 257.89509118943494, Q Loss: 14181.948455810547, Actor Loss: -6751.690689086914
Episode 3588: Time: 0.12073326110839844, Total Reward: 119.3116995566398, Q Loss: 6087.35969543457, Actor Loss: -3355.1136322021484
Episode 3589: Time: 0.2584035396575928, Total Reward: 268.2403206401645, Q Loss: 17076.670135498047, Actor Loss: -6861.297454833984
Episode 3590: Time: 0.16359877586364746, Total Reward: 166.38957213164272, Q Loss: 8784.442794799805, Actor Loss: -4489.758316040039
Episode 3591: Time: 0.17232608795166016, Total Reward: 174.43949774876273, Q Loss: 10338.533721923828, Actor Loss: -4752.828598022461
Episode 3592: Time: 0.1403059959411621, Total Reward: 138.2479077572827, Q Loss: 7475.747512817383, Actor Loss: -3833.294906616211
Episode 3593: Time: 0.4222452640533447, Total Reward: 442.85186446019105, Q Loss: 21140.28921508789, Actor Loss: -11470.762329101562
Episode 3594: Time: 0.20616436004638672, Total Reward: 211.42913604601992, Q Loss: 12327.106246948242, Actor Loss: -5791.286056518555
Episode 3595: Time: 0.7030344009399414, Total Reward: 669.0295158814645, Q Loss: 39789.5666809082, Actor Loss: -17684.163482666016
Episode 3596: Time: 0.3395199775695801, Total Reward: 258.9497123151614, Q Loss: 14404.088012695312, Actor Loss: -7037.470642089844
Episode 3597: Time: 0.3504023551940918, Total Reward: 268.50764961405804, Q Loss: 14102.716720581055, Actor Loss: -7270.423492431641
Episode 3598: Time: 0.3153500556945801, Total Reward: 238.73443702424777, Q Loss: 12786.074737548828, Actor Loss: -6411.4588623046875
Episode 3599: Time: 0.2800583839416504, Total Reward: 211.62082686083437, Q Loss: 12758.286407470703, Actor Loss: -5776.420440673828
Validation Mean: 368.3436427765686, Validation Std: 69.92442502604061
saving model
Episode 3600: Time: 0.18766212463378906, Total Reward: 138.3250235456335, Q Loss: 7153.5836181640625, Actor Loss: -3784.1717376708984
Episode 3601: Time: 0.5367605686187744, Total Reward: 416.6019975763384, Q Loss: 23752.17660522461, Actor Loss: -10940.25016784668
Episode 3602: Time: 0.2802770137786865, Total Reward: 211.99433782478263, Q Loss: 14486.556671142578, Actor Loss: -5913.699005126953
Episode 3603: Time: 0.30352210998535156, Total Reward: 231.8365054410636, Q Loss: 13789.984832763672, Actor Loss: -6480.036605834961

Episode 3604: Time: 0.16356348991394043, Total Reward: 119.3490696879271, Q Loss: 5868.34407043457, Actor Loss: -3420.7561798095703
Episode 3605: Time: 0.47774529457092285, Total Reward: 371.5033184592994, Q Loss: 21857.46304321289, Actor Loss: -10035.632461547852
Episode 3606: Time: 0.24527764320373535, Total Reward: 184.241840941525, Q Loss: 12008.397644042969, Actor Loss: -5057.788513183594
Episode 3607: Time: 0.22187018394470215, Total Reward: 165.8105042473975, Q Loss: 10521.641357421875, Actor Loss: -4563.957794189453
Episode 3608: Time: 0.25678539276123047, Total Reward: 190.36803347949942, Q Loss: 12199.106384277344, Actor Loss: -5193.67497253418
Episode 3609: Time: 0.23369860649108887, Total Reward: 175.24956763096023, Q Loss: 11131.682189941406, Actor Loss: -4862.791046142578
Episode 3610: Time: 0.3859379291534424, Total Reward: 293.8762477438861, Q Loss: 17320.905364990234, Actor Loss: -7824.31201171875
Episode 3611: Time: 0.524425745010376, Total Reward: 406.32643653398344, Q Loss: 25296.556243896484, Actor Loss: -11190.292465209961
Episode 3612: Time: 0.3267195224761963, Total Reward: 249.70366999123155, Q Loss: 16630.8544921875, Actor Loss: -6858.225173950195
Episode 3613: Time: 0.44328737258911133, Total Reward: 341.5854998218209, Q Loss: 24115.265365600586, Actor Loss: -9210.045776367188
Episode 3614: Time: 0.26876139640808105, Total Reward: 202.343433815231, Q Loss: 11565.046569824219, Actor Loss: -5680.124542236328
Episode 3615: Time: 0.23347139358520508, Total Reward: 175.53846883757822, Q Loss: 10779.415802001953, Actor Loss: -4709.364334106445
Episode 3616: Time: 0.36176562309265137, Total Reward: 277.84395271226344, Q Loss: 16408.098022460938, Actor Loss: -7487.135025024414
Episode 3617: Time: 0.3612675666809082, Total Reward: 276.98605268813674, Q Loss: 14861.331420898438, Actor Loss: -7692.333084106445
Episode 3618: Time: 0.8501849174499512, Total Reward: 668.423978234646, Q Loss: 38904.876953125, Actor Loss: -18380.5234375
Episode 3619: Time: 0.14003276824951172, Total Reward: 100.82779473554972, Q Loss: 6988.03369140625, Actor Loss: -2904.884307861328
Episode 3620: Time: 0.4315969944000244, Total Reward: 333.3809317176121, Q Loss: 21634.99951171875, Actor Loss: -9000.857986450195
Episode 3621: Time: 0.30287933349609375, Total Reward: 228.5101550246978, Q Loss: 15394.644897460938, Actor Loss: -6388.987396240234
Episode 3622: Time: 0.4546229839324951, Total Reward: 352.46130148831946, Q Loss: 23872.31965637207, Actor Loss: -9791.746887207031
Episode 3623: Time: 0.3498213291168213, Total Reward: 267.3385028421036, Q Loss: 18110.97738647461, Actor Loss: -7537.706497192383
Episode 3624: Time: 0.7814650535583496, Total Reward: 613.2922597764264, Q Loss: 35634.863021850586, Actor Loss: -16408.2628326416
Episode 3625: Time: 0.10507440567016602, Total Reward: 72.77426643536964, Q Loss: 4580.354339599609, Actor Loss: -2289.4583435058594
Episode 3626: Time: 0.43109893798828125, Total Reward: 333.90456654485195, Q Loss: 22956.470184326172, Actor Loss: -9045.928405761719
Episode 3627: Time: 0.1283128261566162, Total Reward: 91.55739687746778, Q Loss: 6405.065460205078, Actor Loss: -2696.686264038086
Episode 3628: Time: 0.2568209171295166, Total Reward: 192.92629472053903, Q Loss: 14013.807861328125, Actor Loss: -5570.043914794922
Episode 3629: Time: 0.455385684967041, Total Reward: 351.44793219969756, Q Loss: 18969.259368896484, Actor Loss: -9834.159484863281
Episode 3630: Time: 0.7125041484832764, Total Reward: 558.0057008090931, Q Loss: 34008.97579956055, Actor Loss: -15232.088104248047
Episode 3631: Time: 0.4787266254425049, Total Reward: 370.78792363038787, Q Loss: 23391.461181640625, Actor Loss: -10421.154998779297

Episode 3632: Time: 0.26917576789855957, Total Reward: 202.59377194273128, Q Loss: 13426.681289672852, Actor Loss: -5736.010528564453
Episode 3633: Time: 0.418595552444458, Total Reward: 323.5107460111776, Q Loss: 20349.41537475586, Actor Loss: -9092.052230834961
Episode 3634: Time: 0.22143793106079102, Total Reward: 165.43418229231477, Q Loss: 10881.508087158203, Actor Loss: -4735.913665771484
Episode 3635: Time: 0.3512415885925293, Total Reward: 268.05862755356156, Q Loss: 18578.636657714844, Actor Loss: -7343.016143798828
Episode 3636: Time: 0.17531085014343262, Total Reward: 128.77096323774597, Q Loss: 9221.059295654297, Actor Loss: -3786.485122680664
Episode 3637: Time: 0.37305235862731934, Total Reward: 286.30396819018904, Q Loss: 18108.336715698242, Actor Loss: -7927.416976928711
Episode 3638: Time: 0.20995616912841797, Total Reward: 156.1964981311174, Q Loss: 9246.459503173828, Actor Loss: -4603.831954956055
Episode 3639: Time: 0.37285423278808594, Total Reward: 287.5023553806557, Q Loss: 19495.398956298828, Actor Loss: -8042.674011230469
Episode 3640: Time: 0.2335066795349121, Total Reward: 175.77117824156159, Q Loss: 12835.725967407227, Actor Loss: -5010.763763427734
Episode 3641: Time: 0.1748812198638916, Total Reward: 129.06283254418642, Q Loss: 7649.332824707031, Actor Loss: -3758.231964111328
Episode 3642: Time: 0.5663654804229736, Total Reward: 426.5021370576699, Q Loss: 26864.701141357422, Actor Loss: -11968.021697998047
Episode 3643: Time: 0.6081893444061279, Total Reward: 472.78406147613026, Q Loss: 26183.12628173828, Actor Loss: -13347.17367553711
Episode 3644: Time: 0.25728511810302734, Total Reward: 193.38619716882013, Q Loss: 11863.164352416992, Actor Loss: -5711.573593139648
Episode 3645: Time: 0.3276634216308594, Total Reward: 248.57026550336315, Q Loss: 17272.769485473633, Actor Loss: -7041.410919189453
Episode 3646: Time: 0.3155021667480469, Total Reward: 237.98166827780952, Q Loss: 15519.557403564453, Actor Loss: -6849.712509155273
Episode 3647: Time: 0.8169944286346436, Total Reward: 639.6436651816022, Q Loss: 37041.41133117676, Actor Loss: -17887.17318725586
Episode 3648: Time: 0.2692563533782959, Total Reward: 203.49375074967537, Q Loss: 12346.002182006836, Actor Loss: -5738.861968994141
Episode 3649: Time: 0.21066546440124512, Total Reward: 155.91228113789015, Q Loss: 9135.044494628906, Actor Loss: -4657.344055175781
Episode 3650: Time: 0.16355633735656738, Total Reward: 119.0571381587238, Q Loss: 8918.184967041016, Actor Loss: -3496.7530822753906
Episode 3651: Time: 0.10519552230834961, Total Reward: 72.62832357347185, Q Loss: 5637.955871582031, Actor Loss: -2244.082046508789
Episode 3652: Time: 0.41829609870910645, Total Reward: 324.1733538585202, Q Loss: 21091.870559692383, Actor Loss: -9100.779586791992
Episode 3653: Time: 0.36055850982666016, Total Reward: 276.860684220733, Q Loss: 19311.0225982666, Actor Loss: -7951.475311279297
Episode 3654: Time: 0.07022643089294434, Total Reward: 44.68734291646849, Q Loss: 2254.7264862060547, Actor Loss: -1523.8890075683594
Episode 3655: Time: 0.47649073600769043, Total Reward: 371.8218542818252, Q Loss: 23476.507522583008, Actor Loss: -10440.593948364258
Episode 3656: Time: 0.12827157974243164, Total Reward: 91.30881167207946, Q Loss: 5751.680999755859, Actor Loss: -2772.2220916748047
Episode 3657: Time: 0.23415255546569824, Total Reward: 175.44358324962863, Q Loss: 10386.182174682617, Actor Loss: -5084.209335327148
Episode 3658: Time: 0.23378896713256836, Total Reward: 174.91625395583404, Q Loss: 13481.5341796875, Actor Loss: -5231.065124511719
Episode 3659: Time: 0.49046254415802002, Total Reward: 379.36678688018384, Q Loss: 25839.70294189453, Actor Loss: -10808.38688659668

Episode 3660: Time: 0.3504343032836914, Total Reward: 268.8215840245606, Q Loss: 17051.416213989258, Actor Loss: -7726.598770141602
Episode 3661: Time: 0.8275423049926758, Total Reward: 648.9207920859202, Q Loss: 42466.134704589844, Actor Loss: -18251.233688354492
Episode 3662: Time: 0.28003621101379395, Total Reward: 212.0401353319674, Q Loss: 15377.790710449219, Actor Loss: -6003.112899780273
Episode 3663: Time: 0.23368477821350098, Total Reward: 172.90883829095213, Q Loss: 11327.37142944336, Actor Loss: -5097.864318847656
Episode 3664: Time: 0.31499361991882324, Total Reward: 239.84561774359025, Q Loss: 20462.152221679688, Actor Loss: -6884.37287902832
Episode 3665: Time: 0.5022847652435303, Total Reward: 390.5175361750352, Q Loss: 26614.849151611328, Actor Loss: -11141.404602050781
Episode 3666: Time: 0.27323246002197266, Total Reward: 211.8867245504647, Q Loss: 14644.051986694336, Actor Loss: -6371.227447509766
Episode 3667: Time: 0.1920759677886963, Total Reward: 183.0982518994308, Q Loss: 12700.934844970703, Actor Loss: -5212.115982055664
Episode 3668: Time: 0.2842693328857422, Total Reward: 295.2573068057826, Q Loss: 22130.55926513672, Actor Loss: -8508.06509399414
Episode 3669: Time: 0.7476449012756348, Total Reward: 800.2109742709802, Q Loss: 54850.1622467041, Actor Loss: -22484.91714477539
Episode 3670: Time: 0.24963736534118652, Total Reward: 258.74767019332467, Q Loss: 17783.18914794922, Actor Loss: -7543.881896972656
Episode 3671: Time: 0.20697927474975586, Total Reward: 211.82625201674603, Q Loss: 12891.443359375, Actor Loss: -6375.368103027344
Episode 3672: Time: 0.31916332244873047, Total Reward: 331.3815279606043, Q Loss: 22229.076110839844, Actor Loss: -9647.491668701172
Episode 3673: Time: 0.31070423126220703, Total Reward: 323.7427856567259, Q Loss: 24105.44953918457, Actor Loss: -9544.799301147461
Episode 3674: Time: 0.1993861198425293, Total Reward: 202.64982904392141, Q Loss: 14337.264724731445, Actor Loss: -6180.020294189453
Episode 3675: Time: 0.22541046142578125, Total Reward: 231.04313049749135, Q Loss: 15228.79965209961, Actor Loss: -6702.379898071289
Episode 3676: Time: 0.10354089736938477, Total Reward: 100.80713614565235, Q Loss: 7783.905609130859, Actor Loss: -3171.925521850586
Episode 3677: Time: 0.18171429634094238, Total Reward: 184.3386683561417, Q Loss: 13590.748626708984, Actor Loss: -5433.354965209961
Episode 3678: Time: 0.20704221725463867, Total Reward: 211.48403722709764, Q Loss: 14155.690856933594, Actor Loss: -6474.377517700195
Episode 3679: Time: 0.19815945625305176, Total Reward: 203.25790611668393, Q Loss: 13520.330123901367, Actor Loss: -5986.844940185547
Episode 3680: Time: 0.1215522289276123, Total Reward: 119.63750144638679, Q Loss: 8452.647430419922, Actor Loss: -3634.4139556884766
Episode 3681: Time: 0.16550779342651367, Total Reward: 165.29682102787768, Q Loss: 11983.397888183594, Actor Loss: -4862.891464233398
Episode 3682: Time: 0.2438356876373291, Total Reward: 250.097715133081716, Q Loss: 19484.940368652344, Actor Loss: -7330.682144165039
Episode 3683: Time: 0.25356125831604004, Total Reward: 258.22460853447564, Q Loss: 17205.28106689453, Actor Loss: -7548.637435913086
Episode 3684: Time: 0.18386006355285645, Total Reward: 184.163977507826, Q Loss: 11654.655792236328, Actor Loss: -5525.218673706055
Episode 3685: Time: 0.22710132598876953, Total Reward: 228.73442156246188, Q Loss: 17010.794219970703, Actor Loss: -6827.241653442383
Episode 3686: Time: 0.3648712635040283, Total Reward: 380.49134683820336, Q Loss: 24834.27703857422, Actor Loss: -11198.009796142578
Episode 3687: Time: 0.21703600883483887, Total Reward: 221.23436770526814, Q Loss: 15760.257110595703, Actor Loss: -6548.6324462890625

Episode 3688: Time: 0.20879459381103516, Total Reward: 210.80235527763546, Q Loss: 15612.581298828125, Actor Loss: -6217.468307495117
Episode 3689: Time: 0.1988506317138672, Total Reward: 201.79778852037998, Q Loss: 14255.675216674805, Actor Loss: -6155.102676391602
Episode 3690: Time: 0.1047201156616211, Total Reward: 100.78141249743442, Q Loss: 6739.169342041016, Actor Loss: -3175.7840728759766
Episode 3691: Time: 0.09555482864379883, Total Reward: 90.7446546742132, Q Loss: 7030.550872802734, Actor Loss: -3070.0741119384766
Episode 3692: Time: 0.18319320678710938, Total Reward: 183.47356733159498, Q Loss: 13534.312622070312, Actor Loss: -5549.209915161133
Episode 3693: Time: 0.16470956802368164, Total Reward: 165.34587465446947, Q Loss: 11905.1328125, Actor Loss: -4986.6763916015625
Episode 3694: Time: 0.10437440872192383, Total Reward: 100.76388518316695, Q Loss: 7351.992095947266, Actor Loss: -3190.5736694335938
Episode 3695: Time: 0.30458688735961914, Total Reward: 313.83709525527155, Q Loss: 21017.738555908203, Actor Loss: -9379.309020996094
Episode 3696: Time: 0.10421395301818848, Total Reward: 100.8626830258042, Q Loss: 6864.622741699219, Actor Loss: -3105.1648712158203
Episode 3697: Time: 0.2703678607940674, Total Reward: 276.20659918116894, Q Loss: 18088.063415527344, Actor Loss: -8043.8497314453125
Episode 3698: Time: 0.17436552047729492, Total Reward: 175.62260894233467, Q Loss: 11715.37973022461, Actor Loss: -5536.376800537109
Episode 3699: Time: 0.41756296157836914, Total Reward: 435.8625279624745, Q Loss: 29510.484436035156, Actor Loss: -13051.251022338867
Validation Mean: 448.8293830011505, Validation Std: 120.42146100446614
saving model
Episode 3700: Time: 0.32230091094970703, Total Reward: 333.87538915496384, Q Loss: 22840.92172241211, Actor Loss: -9707.450256347656
Episode 3701: Time: 0.09669756889343262, Total Reward: 91.30944794972582, Q Loss: 7168.227081298828, Actor Loss: -2978.326385498047
Episode 3702: Time: 0.1398015022277832, Total Reward: 137.88943439383283, Q Loss: 8952.291946411133, Actor Loss: -4221.986907958984
Episode 3703: Time: 0.15700602531433105, Total Reward: 156.6895534292037, Q Loss: 10044.536804199219, Actor Loss: -4704.74267578125
Episode 3704: Time: 0.10513949394226074, Total Reward: 101.11390713191813, Q Loss: 7841.298583984375, Actor Loss: -3248.5806884765625
Episode 3705: Time: 0.18276262283325195, Total Reward: 184.6226235644447, Q Loss: 12758.363311767578, Actor Loss: -5493.457901000977
Episode 3706: Time: 0.23529672622680664, Total Reward: 239.12234847885313, Q Loss: 18009.577575683594, Actor Loss: -7282.88069152832
Episode 3707: Time: 0.12173199653625488, Total Reward: 119.28252378580868, Q Loss: 9134.764862060547, Actor Loss: -3895.1472930908203
Episode 3708: Time: 0.10506439208984375, Total Reward: 101.1626707452157, Q Loss: 6500.5130615234375, Actor Loss: -3263.7665405273438
Episode 3709: Time: 0.21821379661560059, Total Reward: 222.13316407710025, Q Loss: 16555.302856445312, Actor Loss: -6772.708724975586
Episode 3710: Time: 0.2700042724609375, Total Reward: 277.8817894622812, Q Loss: 21125.301818847656, Actor Loss: -8289.586685180664
Episode 3711: Time: 0.1831967830657959, Total Reward: 184.53334480028835, Q Loss: 12619.539001464844, Actor Loss: -5545.23860168457
Episode 3712: Time: 0.1832730770111084, Total Reward: 184.50905752267587, Q Loss: 14983.952178955078, Actor Loss: -5658.677169799805
Episode 3713: Time: 0.17427444458007812, Total Reward: 173.37011392437182, Q Loss: 11361.391021728516, Actor Loss: -5364.824310302734
Episode 3714: Time: 0.27848148345947266, Total Reward: 285.78105244106285, Q Loss: 20644.62353515625, Actor Loss: -8472.387130737305

Episode 3715: Time: 0.46098971366882324, Total Reward: 482.73858475790513, Q Loss: 37067.49694824219, Actor Loss: -14520.154373168945
Episode 3716: Time: 0.33080458641052246, Total Reward: 342.4522306042963, Q Loss: 25595.500213623047, Actor Loss: -10133.818283081055
Episode 3717: Time: 0.39975595474243164, Total Reward: 416.78051632472517, Q Loss: 30543.840240478516, Actor Loss: -12275.708206176758
Episode 3718: Time: 0.26987743377685547, Total Reward: 278.1244018031866, Q Loss: 20316.635498046875, Actor Loss: -8501.414962768555
Episode 3719: Time: 0.06976628303527832, Total Reward: 63.44188408185571, Q Loss: 4667.211151123047, Actor Loss: -2131.7174224853516
Episode 3720: Time: 0.13054943084716797, Total Reward: 128.4964000722446, Q Loss: 11863.238067626953, Actor Loss: -4167.393905639648
Episode 3721: Time: 0.3344871997833252, Total Reward: 343.5228151173576, Q Loss: 27696.77471923828, Actor Loss: -10314.694915771484
Episode 3722: Time: 0.12305378913879395, Total Reward: 119.33391053241012, Q Loss: 8490.905715942383, Actor Loss: -3754.2460021972656
Episode 3723: Time: 0.19266462326049805, Total Reward: 194.38594251681786, Q Loss: 16020.650756835938, Actor Loss: -5979.022201538086
Episode 3724: Time: 0.19193100929260254, Total Reward: 190.88811419732994, Q Loss: 15139.504898071289, Actor Loss: -5857.0736083984375
Episode 3725: Time: 0.23585224151611328, Total Reward: 240.06539674236964, Q Loss: 19850.386260986328, Actor Loss: -7720.837554931641
Episode 3726: Time: 0.23505306243896484, Total Reward: 236.98416289933945, Q Loss: 19210.93147277832, Actor Loss: -7395.041061401367
Episode 3727: Time: 0.4523274898529053, Total Reward: 473.7160381168304, Q Loss: 38256.75198364258, Actor Loss: -14523.156295776367
Episode 3728: Time: 0.28708624839782715, Total Reward: 296.64070341769315, Q Loss: 22102.862396240234, Actor Loss: -8887.821273803711
Episode 3729: Time: 0.16489791870117188, Total Reward: 164.7566077796229, Q Loss: 11624.389846801758, Actor Loss: -5144.901748657227
Episode 3730: Time: 0.2093064785003662, Total Reward: 209.28146155062558, Q Loss: 18802.923736572266, Actor Loss: -6558.339096069336
Episode 3731: Time: 0.09614062309265137, Total Reward: 91.60434640994237, Q Loss: 7455.419464111328, Actor Loss: -3025.1798553466797
Episode 3732: Time: 0.14802789688110352, Total Reward: 146.94919992434768, Q Loss: 12234.110626220703, Actor Loss: -4397.575088500977
Episode 3733: Time: 0.20944523811340332, Total Reward: 212.25541667294223, Q Loss: 15302.687286376953, Actor Loss: -6744.084457397461
Episode 3734: Time: 0.25298404693603516, Total Reward: 258.10008113817054, Q Loss: 18968.5771484375, Actor Loss: -7924.335205078125
Episode 3735: Time: 0.21851706504821777, Total Reward: 220.38349354577196, Q Loss: 18004.220611572266, Actor Loss: -6701.186447143555
Episode 3736: Time: 0.4529094696044922, Total Reward: 473.77048284543105, Q Loss: 36230.32373046875, Actor Loss: -14260.431045532227
Episode 3737: Time: 0.3307504653930664, Total Reward: 342.97651230371304, Q Loss: 25812.370727539062, Actor Loss: -10503.608032226562
Episode 3738: Time: 0.2528197765350342, Total Reward: 258.2923224626095, Q Loss: 19187.473236083984, Actor Loss: -8066.570297241211
Episode 3739: Time: 0.24354934692382812, Total Reward: 249.0150370255597, Q Loss: 19097.318267822266, Actor Loss: -7708.166946411133
Episode 3740: Time: 0.10444521903991699, Total Reward: 100.83115425681825, Q Loss: 8415.511322021484, Actor Loss: -3394.722930908203
Episode 3741: Time: 0.20077061653137207, Total Reward: 202.08520807335515, Q Loss: 14655.710723876953, Actor Loss: -6461.075622558594
Episode 3742: Time: 0.13118410110473633, Total Reward: 128.68472727738234, Q Loss: 10504.119445800781, Actor Loss: -4118.963241577148

Episode 3743: Time: 0.26944661140441895, Total Reward: 278.1486014421502, Q Loss: 20850.638626098633, Actor Loss: -8559.322387695312
Episode 3744: Time: 0.1651778221130371, Total Reward: 164.7148181007509, Q Loss: 11957.355041503906, Actor Loss: -5248.667022705078
Episode 3745: Time: 0.31362009048461914, Total Reward: 324.49867382289364, Q Loss: 25935.73779296875, Actor Loss: -9870.32583618164
Episode 3746: Time: 0.0698862075805664, Total Reward: 62.6651543054629, Q Loss: 5114.948471069336, Actor Loss: -2193.299285888672
Episode 3747: Time: 0.25415611267089844, Total Reward: 258.8585581830397, Q Loss: 17927.669555664062, Actor Loss: -7814.563995361328
Episode 3748: Time: 0.2703537940979004, Total Reward: 276.74577621023167, Q Loss: 23517.446380615234, Actor Loss: -8777.532211303711
Episode 3749: Time: 0.08739781379699707, Total Reward: 82.30415577493649, Q Loss: 6252.482727050781, Actor Loss: -2877.8974609375
Episode 3750: Time: 0.16661500930786133, Total Reward: 164.32313942266455, Q Loss: 14643.40478515625, Actor Loss: -5276.112258911133
Episode 3751: Time: 0.2355661392211914, Total Reward: 240.2414440608865, Q Loss: 21532.339965820312, Actor Loss: -7537.247131347656
Episode 3752: Time: 0.26140499114990234, Total Reward: 268.29183876183487, Q Loss: 22117.749633789062, Actor Loss: -8369.508987426758
Episode 3753: Time: 0.2795276641845703, Total Reward: 285.17351833427693, Q Loss: 21783.67529296875, Actor Loss: -8751.818908691406
Episode 3754: Time: 0.15773844718933105, Total Reward: 156.95753612226392, Q Loss: 13041.044311523438, Actor Loss: -5169.749588012695
Episode 3755: Time: 0.22756671905517578, Total Reward: 229.62366324704433, Q Loss: 18919.792602539062, Actor Loss: -7321.006851196289
Episode 3756: Time: 0.13053441047668457, Total Reward: 128.979637141363, Q Loss: 11476.23063659668, Actor Loss: -4256.520050048828
Episode 3757: Time: 0.15702247619628906, Total Reward: 156.6608901645066, Q Loss: 13052.698364257812, Actor Loss: -5018.510955810547
Episode 3758: Time: 0.12180471420288086, Total Reward: 118.7887201163096, Q Loss: 10328.116760253906, Actor Loss: -3827.243637084961
Episode 3759: Time: 0.30455446243286133, Total Reward: 314.71788512577444, Q Loss: 24331.74464416504, Actor Loss: -10064.689926147461
Episode 3760: Time: 0.11377453804016113, Total Reward: 110.17416790107542, Q Loss: 10215.404418945312, Actor Loss: -3560.299774169922
Episode 3761: Time: 0.20486879348754883, Total Reward: 184.5679918044376, Q Loss: 14627.887084960938, Actor Loss: -5832.626434326172
Episode 3762: Time: 0.5049412250518799, Total Reward: 433.78927366125794, Q Loss: 40268.156829833984, Actor Loss: -13180.24674987793
Episode 3763: Time: 0.08454751968383789, Total Reward: 63.05024501429925, Q Loss: 5100.890655517578, Actor Loss: -2247.907241821289
Episode 3764: Time: 0.31683874130249023, Total Reward: 267.86762846534145, Q Loss: 21414.35235595703, Actor Loss: -8497.551544189453
Episode 3765: Time: 0.2215712070465088, Total Reward: 180.6968206258028, Q Loss: 14982.91244506836, Actor Loss: -5819.745178222656
Episode 3766: Time: 0.1688854694366455, Total Reward: 138.36673344714262, Q Loss: 11799.264556884766, Actor Loss: -4426.646911621094
Episode 3767: Time: 0.3904557228088379, Total Reward: 334.0784896698555, Q Loss: 26188.973999023438, Actor Loss: -10327.0732421875
Episode 3768: Time: 0.7997159957885742, Total Reward: 697.3897308089417, Q Loss: 54745.079650878906, Actor Loss: -20927.450775146484
Episode 3769: Time: 0.15793275833129883, Total Reward: 129.00452726269629, Q Loss: 12885.596069335938, Actor Loss: -4161.451309204102
Episode 3770: Time: 0.3899707794189453, Total Reward: 331.99571033695713, Q Loss: 28418.07159423828, Actor Loss: -10502.36294555664

Episode 3771: Time: 0.13712310791015625, Total Reward: 110.03533040713587, Q Loss: 9842.031127929688, Actor Loss: -3646.329132080078
Episode 3772: Time: 0.36916065216064453, Total Reward: 313.277181494462, Q Loss: 24653.361785888672, Actor Loss: -9568.004409790039
Episode 3773: Time: 0.38065576553344727, Total Reward: 323.3621207713646, Q Loss: 24522.761810302734, Actor Loss: -10186.903945922852
Episode 3774: Time: 0.3695530891418457, Total Reward: 312.6234666295771, Q Loss: 23194.90411376953, Actor Loss: -9665.707885742188
Episode 3775: Time: 0.40108656883239746, Total Reward: 342.07801445508466, Q Loss: 32320.88168334961, Actor Loss: -10916.878860473633
Episode 3776: Time: 0.29602670669555664, Total Reward: 246.46077891102968, Q Loss: 21374.524322509766, Actor Loss: -8034.458099365234
Episode 3777: Time: 0.14802932739257812, Total Reward: 119.43941943646477, Q Loss: 10252.97280883789, Actor Loss: -4082.4075317382812
Episode 3778: Time: 0.08517932891845703, Total Reward: 62.70180745472126, Q Loss: 6828.658996582031, Actor Loss: -2357.4854431152344
Episode 3779: Time: 0.24290680885314941, Total Reward: 202.60128327955226, Q Loss: 17149.852600097656, Actor Loss: -6469.238067626953
Episode 3780: Time: 0.21155762672424316, Total Reward: 175.57701780254502, Q Loss: 16475.599807739258, Actor Loss: -5641.196243286133
Episode 3781: Time: 0.27486205101013184, Total Reward: 229.07810611982597, Q Loss: 19888.38638305664, Actor Loss: -7649.751449584961
Episode 3782: Time: 0.1480259895324707, Total Reward: 119.36650356062462, Q Loss: 10983.89794921875, Actor Loss: -3876.361129760742
Episode 3783: Time: 0.2012791633605957, Total Reward: 166.26261857673418, Q Loss: 14531.23208618164, Actor Loss: -5501.807342529297
Episode 3784: Time: 0.2113208770751953, Total Reward: 175.2343937644382, Q Loss: 16643.233673095703, Actor Loss: -5756.923431396484
Episode 3785: Time: 0.2641334533691406, Total Reward: 220.8669890320863, Q Loss: 17269.50131225586, Actor Loss: -7059.1727294921875
Episode 3786: Time: 0.22200918197631836, Total Reward: 185.14165055495823, Q Loss: 15946.994598388672, Actor Loss: -5920.372833251953
Episode 3787: Time: 0.3074374198913574, Total Reward: 255.55139465764384, Q Loss: 24792.54833984375, Actor Loss: -8378.195617675781
Episode 3788: Time: 0.2543962001800537, Total Reward: 212.28102457835763, Q Loss: 17478.36895751953, Actor Loss: -6801.7489013671875
Episode 3789: Time: 0.22225189208984375, Total Reward: 185.13119987250127, Q Loss: 17641.086303710938, Actor Loss: -6315.226623535156
Episode 3790: Time: 0.13736414909362793, Total Reward: 109.62935752494481, Q Loss: 10110.072692871094, Actor Loss: -3875.2986755371094
Episode 3791: Time: 0.560093879699707, Total Reward: 481.80802718455675, Q Loss: 40447.32369995117, Actor Loss: -15294.40071105957
Episode 3792: Time: 0.3592967987060547, Total Reward: 305.7022476585266, Q Loss: 26103.119842529297, Actor Loss: -10113.571166992188
Episode 3793: Time: 0.3174314498901367, Total Reward: 267.92733418643616, Q Loss: 20875.21710205078, Actor Loss: -8542.350677490234
Episode 3794: Time: 0.30609917640686035, Total Reward: 257.0938468072882, Q Loss: 23083.235382080078, Actor Loss: -8396.081726074219
Episode 3795: Time: 0.20045709609985352, Total Reward: 165.4986531673151, Q Loss: 18144.049591064453, Actor Loss: -5339.240753173828
Episode 3796: Time: 0.21209239959716797, Total Reward: 173.72854187615903, Q Loss: 13785.988311767578, Actor Loss: -5652.746765136719
Episode 3797: Time: 0.49742650985717773, Total Reward: 427.28914316671086, Q Loss: 33529.69369506836, Actor Loss: -13498.937606811523
Episode 3798: Time: 0.4120340347290039, Total Reward: 351.2378380917002, Q Loss: 31793.125610351562, Actor Loss: -11157.653579711914

Episode 3799: Time: 0.39070844650268555, Total Reward: 333.9824727512853, Q Loss: 31008.854370117188, Actor Loss: -10702.151962280273
Validation Mean: 451.4941615517754, Validation Std: 93.14084384369403
saving model
Episode 3800: Time: 0.22393083572387695, Total Reward: 184.316543379946, Q Loss: 16688.14141845703, Actor Loss: -6177.048233032227
Episode 3801: Time: 0.3488321304321289, Total Reward: 296.0268926475827, Q Loss: 25992.563858032227, Actor Loss: -9421.996841430664
Episode 3802: Time: 0.10581064224243164, Total Reward: 81.84148408787708, Q Loss: 9403.920593261719, Actor Loss: -2979.5888671875
Episode 3803: Time: 0.4752929210662842, Total Reward: 408.7304432206761, Q Loss: 35884.14047241211, Actor Loss: -13025.440628051758
Episode 3804: Time: 0.4018113613128662, Total Reward: 343.8757265666964, Q Loss: 35552.159240722656, Actor Loss: -11053.085693359375
Episode 3805: Time: 0.09555959701538086, Total Reward: 73.0624654868757, Q Loss: 7223.040924072266, Actor Loss: -2582.7064208984375
Episode 3806: Time: 0.26450300216674805, Total Reward: 221.51714281899615, Q Loss: 20594.771362304688, Actor Loss: -7397.316253662109
Episode 3807: Time: 0.23280739784240723, Total Reward: 193.98759044285495, Q Loss: 19956.83172607422, Actor Loss: -6513.031036376953
Episode 3808: Time: 0.1583249568939209, Total Reward: 128.73109846585234, Q Loss: 10569.118774414062, Actor Loss: -4313.202056884766
Episode 3809: Time: 0.18003129959106445, Total Reward: 147.19877815125665, Q Loss: 12728.420623779297, Actor Loss: -4919.987503051758
Episode 3810: Time: 0.38063669204711914, Total Reward: 324.5961928608195, Q Loss: 30618.35531616211, Actor Loss: -10486.926712036133
Episode 3811: Time: 0.23281359672546387, Total Reward: 194.4776711926744, Q Loss: 15561.267944335938, Actor Loss: -6548.520111083984
Episode 3812: Time: 0.32787370681762695, Total Reward: 277.2409313741524, Q Loss: 24112.148895263672, Actor Loss: -9060.670272827148
Episode 3813: Time: 0.28536534309387207, Total Reward: 240.33427269405692, Q Loss: 23035.82781982422, Actor Loss: -8108.4486083984375
Episode 3814: Time: 0.6020472049713135, Total Reward: 518.2095987837107, Q Loss: 44389.73907470703, Actor Loss: -16653.82290649414
Episode 3815: Time: 0.29618263244628906, Total Reward: 248.94424159246125, Q Loss: 18484.256256103516, Actor Loss: -7937.7989501953125
Episode 3816: Time: 0.5279648303985596, Total Reward: 454.1963950904875, Q Loss: 40893.88215637207, Actor Loss: -14443.228546142578
Episode 3817: Time: 0.14776372909545898, Total Reward: 118.82003296543972, Q Loss: 10885.422729492188, Actor Loss: -4096.799697875977
Episode 3818: Time: 0.12720584869384766, Total Reward: 100.67613672929076, Q Loss: 10364.270446777344, Actor Loss: -3518.59814453125
Episode 3819: Time: 0.29611706733703613, Total Reward: 248.43861283789514, Q Loss: 24126.790130615234, Actor Loss: -8195.493957519531
Episode 3820: Time: 0.44312047958374023, Total Reward: 380.310329309627, Q Loss: 33876.55358886719, Actor Loss: -12134.742767333984
Episode 3821: Time: 0.285977840423584, Total Reward: 238.2282126459936, Q Loss: 25705.886444091797, Actor Loss: -7907.970367431641
Episode 3822: Time: 0.3173332214355469, Total Reward: 267.0694632435434, Q Loss: 28230.93829345703, Actor Loss: -9097.921173095703
Episode 3823: Time: 0.14825201034545898, Total Reward: 119.78322989528262, Q Loss: 11220.14404296875, Actor Loss: -4166.114105224609
Episode 3824: Time: 0.24355053901672363, Total Reward: 203.06222498976192, Q Loss: 20393.114227294922, Actor Loss: -6934.795379638672
Episode 3825: Time: 0.1479787826538086, Total Reward: 119.02978472838018, Q Loss: 11019.673095703125, Actor Loss: -4072.9468383789062

Episode 3826: Time: 0.6445374488830566, Total Reward: 557.2572752960594, Q Loss: 52056.712493896484, Actor Loss: -17873.90802001953
Episode 3827: Time: 0.25389742851257324, Total Reward: 212.46850883495483, Q Loss: 19517.016571044922, Actor Loss: -6980.416290283203
Episode 3828: Time: 0.495086669921875, Total Reward: 425.69816535572807, Q Loss: 36999.93240356445, Actor Loss: -13918.566345214844
Episode 3829: Time: 0.35895419120788574, Total Reward: 305.4636879532578, Q Loss: 28007.995574951172, Actor Loss: -9858.972412109375
Episode 3830: Time: 0.2851855754852295, Total Reward: 238.9469332934648, Q Loss: 23632.41290283203, Actor Loss: -8012.8367919921875
Episode 3831: Time: 0.2006380558013916, Total Reward: 166.29626576301993, Q Loss: 16381.322692871094, Actor Loss: -5647.439910888672
Episode 3832: Time: 0.20070815086364746, Total Reward: 166.34221545490266, Q Loss: 17186.442626953125, Actor Loss: -5807.371032714844
Episode 3833: Time: 0.31642627716064453, Total Reward: 268.60808559130743, Q Loss: 29898.67950439453, Actor Loss: -8696.511352539062
Episode 3834: Time: 0.2330765724182129, Total Reward: 191.53001519058844, Q Loss: 20402.452026367188, Actor Loss: -6713.961151123047
Episode 3835: Time: 0.5170905590057373, Total Reward: 445.09506354836424, Q Loss: 43604.62533569336, Actor Loss: -14475.044464111328
Episode 3836: Time: 0.2958261966705322, Total Reward: 249.80429553174235, Q Loss: 22652.264862060547, Actor Loss: -7976.48225402832
Episode 3837: Time: 0.6008563041687012, Total Reward: 520.0541438688921, Q Loss: 48455.77770996094, Actor Loss: -17190.16993713379
Episode 3838: Time: 0.3592343330383301, Total Reward: 305.62119144328835, Q Loss: 33054.98498535156, Actor Loss: -10118.644500732422
Episode 3839: Time: 0.4320244789123535, Total Reward: 370.95720822486066, Q Loss: 39566.607666015625, Actor Loss: -12702.516006469727
Episode 3840: Time: 0.07413506507873535, Total Reward: 53.89824117322102, Q Loss: 5974.665771484375, Actor Loss: -2108.1109619140625
Episode 3841: Time: 0.13797307014465332, Total Reward: 109.83498548165413, Q Loss: 9651.915130615234, Actor Loss: -3959.674591064453
Episode 3842: Time: 0.32726311683654785, Total Reward: 277.42894497990767, Q Loss: 28435.205810546875, Actor Loss: -9420.892120361328
Episode 3843: Time: 0.22211241722106934, Total Reward: 184.51853207808284, Q Loss: 19062.49154663086, Actor Loss: -6388.740386962891
Episode 3844: Time: 0.12671995162963867, Total Reward: 100.3843307591791, Q Loss: 8310.346954345703, Actor Loss: -3705.9720764160156
Episode 3845: Time: 0.10627555847167969, Total Reward: 82.48680924840397, Q Loss: 9422.17514038086, Actor Loss: -3093.483154296875
Episode 3846: Time: 0.19057917594909668, Total Reward: 156.75940284351057, Q Loss: 19088.793670654297, Actor Loss: -5560.223724365234
Episode 3847: Time: 0.2760164737701416, Total Reward: 229.25037734306125, Q Loss: 21681.456268310547, Actor Loss: -7734.863464355469
Episode 3848: Time: 0.6552567481994629, Total Reward: 564.7296412974245, Q Loss: 51053.70248413086, Actor Loss: -18786.28776550293
Episode 3849: Time: 0.17947626113891602, Total Reward: 147.32181440298672, Q Loss: 13339.621490478516, Actor Loss: -5029.541595458984
Episode 3850: Time: 0.2011866569519043, Total Reward: 165.036916855829, Q Loss: 20897.15835571289, Actor Loss: -5725.399322509766
Episode 3851: Time: 0.24352622032165527, Total Reward: 203.19471024571519, Q Loss: 21883.571990966797, Actor Loss: -7012.423400878906
Episode 3852: Time: 0.25386953353881836, Total Reward: 212.67032238677618, Q Loss: 21900.99575805664, Actor Loss: -7179.133758544922
Episode 3853: Time: 0.275057315826416, Total Reward: 228.19545994898573, Q Loss: 22121.92446899414, Actor Loss: -7832.7017822265625

Episode 3854: Time: 0.49666857719421387, Total Reward: 427.720702217975, Q Loss: 38774.427963256836, Actor Loss: -14064.942306518555
Episode 3855: Time: 0.2746133804321289, Total Reward: 230.74073642292532, Q Loss: 20196.998443603516, Actor Loss: -7854.971527099609
Episode 3856: Time: 0.15837907791137695, Total Reward: 128.4766473237977, Q Loss: 13462.677062988281, Actor Loss: -4442.012542724609
Episode 3857: Time: 0.44318485260009766, Total Reward: 379.65983512011815, Q Loss: 39625.554779052734, Actor Loss: -12684.92953491211
Episode 3858: Time: 0.34758710861206055, Total Reward: 296.46602185537677, Q Loss: 26328.819213867188, Actor Loss: -10084.299880981445
Episode 3859: Time: 0.4216444492340088, Total Reward: 361.37770000148146, Q Loss: 37252.005767822266, Actor Loss: -12708.462646484375
Episode 3860: Time: 0.2109365463256836, Total Reward: 172.69479020055692, Q Loss: 17042.110412597656, Actor Loss: -6079.859436035156
Episode 3861: Time: 0.14780759811401367, Total Reward: 117.95124170467032, Q Loss: 11914.546905517578, Actor Loss: -4256.106307983398
Episode 3862: Time: 0.6009578704833984, Total Reward: 519.3335876850738, Q Loss: 58033.902923583984, Actor Loss: -17362.33056640625
Episode 3863: Time: 0.3166837692260742, Total Reward: 268.10783349224465, Q Loss: 23566.505126953125, Actor Loss: -9084.646759033203
Episode 3864: Time: 0.1055912971496582, Total Reward: 82.35447039100428, Q Loss: 7191.891754150391, Actor Loss: -3014.452850341797
Episode 3865: Time: 0.17970705032348633, Total Reward: 147.2573618037272, Q Loss: 18999.177612304688, Actor Loss: -5267.884704589844
Episode 3866: Time: 0.40137672424316406, Total Reward: 341.51878719040536, Q Loss: 35580.20559692383, Actor Loss: -11832.929443359375
Episode 3867: Time: 0.36965107917785645, Total Reward: 314.99193203228594, Q Loss: 34018.88528442383, Actor Loss: -10770.247787475586
Episode 3868: Time: 0.2854907512664795, Total Reward: 238.99964225584287, Q Loss: 21777.939514160156, Actor Loss: -8312.874877929688
Episode 3869: Time: 0.3273200988769531, Total Reward: 276.48205198541353, Q Loss: 28429.925262451172, Actor Loss: -9460.608154296875
Episode 3870: Time: 0.13735485076904297, Total Reward: 110.26290620382689, Q Loss: 14515.964324951172, Actor Loss: -3998.316680908203
Episode 3871: Time: 0.32745933532714844, Total Reward: 276.5357646989909, Q Loss: 26731.678680419922, Actor Loss: -9497.346496582031
Episode 3872: Time: 0.25384044647216797, Total Reward: 212.03298309006948, Q Loss: 21747.584045410156, Actor Loss: -7673.164413452148
Episode 3873: Time: 0.1374819278717041, Total Reward: 109.45485246580594, Q Loss: 11993.61996459961, Actor Loss: -4231.067687988281
Episode 3874: Time: 1.433821678161621, Total Reward: 1255.1063008459107, Q Loss: 124008.31552124023, Actor Loss: -41843.93405151367
Episode 3875: Time: 0.38974714279174805, Total Reward: 330.8914831349878, Q Loss: 32433.062713623047, Actor Loss: -11716.457550048828
Episode 3876: Time: 0.3482527732849121, Total Reward: 294.5439853072783, Q Loss: 29061.70492553711, Actor Loss: -10256.469955444336
Episode 3877: Time: 0.33858180046081543, Total Reward: 287.1913306795503, Q Loss: 32228.748474121094, Actor Loss: -9800.687713623047
Episode 3878: Time: 0.46408581733703613, Total Reward: 396.773661626924, Q Loss: 43250.39483642578, Actor Loss: -13654.156967163086
Episode 3879: Time: 0.35927653312683105, Total Reward: 306.2755628560758, Q Loss: 30244.218963623047, Actor Loss: -10359.340148925781
Episode 3880: Time: 0.09532666206359863, Total Reward: 72.14128751342372, Q Loss: 9818.35873413086, Actor Loss: -2734.5126342773438
Episode 3881: Time: 0.33802223205566406, Total Reward: 285.74819735703454, Q Loss: 35603.396728515625, Actor Loss: -10232.4169921875

Episode 3882: Time: 0.33840227127075195, Total Reward: 286.24618988143925, Q Loss: 39348.131774902344, Actor Loss: -9869.24560546875
Episode 3883: Time: 0.4125175476074219, Total Reward: 350.89609848888887, Q Loss: 35028.98681640625, Actor Loss: -12088.642395019531
Episode 3884: Time: 0.5805389881134033, Total Reward: 500.6896013073527, Q Loss: 56964.36544799805, Actor Loss: -17643.603393554688
Episode 3885: Time: 1.1188483238220215, Total Reward: 975.9489216243038, Q Loss: 99427.05850219727, Actor Loss: -33343.37245178223
Episode 3886: Time: 0.2965071201324463, Total Reward: 249.72271978200615, Q Loss: 23856.680419921875, Actor Loss: -8924.985534667969
Episode 3887: Time: 0.1480112075805664, Total Reward: 119.34295643123548, Q Loss: 15101.088317871094, Actor Loss: -4441.028106689453
Episode 3888: Time: 0.29596638679504395, Total Reward: 250.27190523177208, Q Loss: 25591.642028808594, Actor Loss: -8772.183288574219
Episode 3889: Time: 0.39266204833984375, Total Reward: 333.6820014493513, Q Loss: 34412.43634033203, Actor Loss: -11857.520050048828
Episode 3890: Time: 0.2655673027038574, Total Reward: 221.2076993800595, Q Loss: 24125.67901611328, Actor Loss: -7947.187759399414
Episode 3891: Time: 0.11652326583862305, Total Reward: 91.41861459573971, Q Loss: 14011.809967041016, Actor Loss: -3301.707763671875
Episode 3892: Time: 0.30637502670288086, Total Reward: 259.41117148733014, Q Loss: 28428.61981201172, Actor Loss: -9271.593780517578
Episode 3893: Time: 0.2854480743408203, Total Reward: 239.12903550853835, Q Loss: 27442.859588623047, Actor Loss: -8318.385726928711
Episode 3894: Time: 0.23262906074523926, Total Reward: 193.69725557561756, Q Loss: 24452.05694580078, Actor Loss: -7137.4783935546875
Episode 3895: Time: 0.3904416561126709, Total Reward: 332.7908779297698, Q Loss: 33230.80407714844, Actor Loss: -12252.274139404297
Episode 3896: Time: 0.14807415008544922, Total Reward: 119.10828947377841, Q Loss: 13623.396911621094, Actor Loss: -4355.880065917969
Episode 3897: Time: 0.2747156620025635, Total Reward: 229.6352100020921, Q Loss: 24592.204711914062, Actor Loss: -8308.582611083984
Episode 3898: Time: 0.2536044120788574, Total Reward: 210.77707274628557, Q Loss: 22678.151489257812, Actor Loss: -7532.971038818359
Episode 3899: Time: 0.2327589988708496, Total Reward: 192.11136067138992, Q Loss: 25964.228515625, Actor Loss: -7202.974639892578
Validation Mean: 501.73497308052555, Validation Std: 81.50011340690546
saving model
Episode 3900: Time: 0.17009615898132324, Total Reward: 137.56799343893297, Q Loss: 14077.915222167969, Actor Loss: -5159.846038818359
Episode 3901: Time: 0.28613853454589844, Total Reward: 238.2281745432973, Q Loss: 26979.174072265625, Actor Loss: -8596.326293945312
Episode 3902: Time: 0.3486604690551758, Total Reward: 296.0737994577784, Q Loss: 30660.56719970703, Actor Loss: -10653.90771484375
Episode 3903: Time: 0.25404977798461914, Total Reward: 212.17634659080662, Q Loss: 25433.82144165039, Actor Loss: -7632.511123657227
Episode 3904: Time: 0.2847161293029785, Total Reward: 239.635680428208, Q Loss: 25266.397216796875, Actor Loss: -8605.403717041016
Episode 3905: Time: 0.24282193183898926, Total Reward: 203.2038488173384, Q Loss: 23566.780334472656, Actor Loss: -7415.226623535156
Episode 3906: Time: 0.28510260581970215, Total Reward: 240.32434088507168, Q Loss: 29005.704132080078, Actor Loss: -8519.08544921875
Episode 3907: Time: 0.1791534423828125, Total Reward: 147.71994071789578, Q Loss: 18496.33740234375, Actor Loss: -5261.985900878906
Episode 3908: Time: 0.17991971969604492, Total Reward: 147.3353492022549, Q Loss: 23196.718017578125, Actor Loss: -5475.130096435547

Episode 3909: Time: 0.17960095405578613, Total Reward: 146.41444515702491, Q Loss: 14830.992736816406, Actor Loss: -5526.0595703125
Episode 3910: Time: 0.23291969299316406, Total Reward: 193.05428281191408, Q Loss: 20410.723999023438, Actor Loss: -7124.736480712891
Episode 3911: Time: 0.2961428165435791, Total Reward: 249.29996617394758, Q Loss: 24726.73745727539, Actor Loss: -9077.25064086914
Episode 3912: Time: 0.3486800193786621, Total Reward: 296.2142671889108, Q Loss: 31515.358276367188, Actor Loss: -10834.38607788086
Episode 3913: Time: 0.5385982990264893, Total Reward: 462.9759278989077, Q Loss: 50829.466064453125, Actor Loss: -16088.647430419922
Episode 3914: Time: 0.3062403202056885, Total Reward: 258.24190171969695, Q Loss: 26744.67724609375, Actor Loss: -9362.47607421875
Episode 3915: Time: 0.28554821014404297, Total Reward: 238.77577947318, Q Loss: 25720.956420898438, Actor Loss: -8626.71322631836
Episode 3916: Time: 0.23241353034973145, Total Reward: 191.7917350430491, Q Loss: 20687.62469482422, Actor Loss: -7078.858825683594
Episode 3917: Time: 0.2960076332092285, Total Reward: 247.39154578478016, Q Loss: 27882.93670654297, Actor Loss: -8927.157257080078
Episode 3918: Time: 0.1479816436767578, Total Reward: 119.97203438971651, Q Loss: 13119.873077392578, Actor Loss: -4669.818328857422
Episode 3919: Time: 0.11684751510620117, Total Reward: 91.4000970935138, Q Loss: 12297.856811523438, Actor Loss: -3661.068115234375
Episode 3920: Time: 0.2858700752258301, Total Reward: 239.16543828405938, Q Loss: 24426.006927490234, Actor Loss: -8555.908203125
Episode 3921: Time: 0.22197771072387695, Total Reward: 185.26378565484944, Q Loss: 23160.47933959961, Actor Loss: -6693.876892089844
Episode 3922: Time: 0.15848374366760254, Total Reward: 129.04190556940512, Q Loss: 18325.567443847656, Actor Loss: -4950.145446777344
Episode 3923: Time: 0.2537038326263428, Total Reward: 212.24962567232282, Q Loss: 24659.826721191406, Actor Loss: -7739.905670166016
Episode 3924: Time: 0.29577040672302246, Total Reward: 249.99327736867863, Q Loss: 32904.03155517578, Actor Loss: -8997.321960449219
Episode 3925: Time: 0.2638378143310547, Total Reward: 217.93732040425633, Q Loss: 23756.96127319336, Actor Loss: -8113.768646240234
Episode 3926: Time: 0.31654858589172363, Total Reward: 267.1420449927885, Q Loss: 28651.643981933594, Actor Loss: -9738.580154418945
Episode 3927: Time: 0.1797935962677002, Total Reward: 146.30067794860457, Q Loss: 14725.167785644531, Actor Loss: -5400.281555175781
Episode 3928: Time: 0.23301219940185547, Total Reward: 191.70270993302375, Q Loss: 20931.513641357422, Actor Loss: -6933.157501220703
Episode 3929: Time: 0.8544213771820068, Total Reward: 743.5354745806075, Q Loss: 95784.76821899414, Actor Loss: -26315.024047851562
Episode 3930: Time: 0.5807678699493408, Total Reward: 501.80722783881697, Q Loss: 60639.18673706055, Actor Loss: -17688.83204650879
Episode 3931: Time: 0.1056668758392334, Total Reward: 81.96971889583244, Q Loss: 9964.479064941406, Actor Loss: -3159.5079956054688
Episode 3932: Time: 0.16932129859924316, Total Reward: 137.18091725963976, Q Loss: 19807.76593017578, Actor Loss: -5151.138977050781
Episode 3933: Time: 0.2117757797241211, Total Reward: 175.25183501354726, Q Loss: 22157.573944091797, Actor Loss: -6643.9935302734375
Episode 3934: Time: 0.23244214057922363, Total Reward: 194.29133520325237, Q Loss: 26994.735473632812, Actor Loss: -7034.871429443359
Episode 3935: Time: 0.3166632652282715, Total Reward: 265.96768044119557, Q Loss: 35232.586364746094, Actor Loss: -9657.44775390625
Episode 3936: Time: 0.11652231216430664, Total Reward: 91.45434288994791, Q Loss: 9868.281524658203, Actor Loss: -3561.2691955566406

Episode 3937: Time: 0.3071894645690918, Total Reward: 257.90391391881195, Q Loss: 31906.32470703125, Actor Loss: -9362.386535644531
Episode 3938: Time: 0.1483449935913086, Total Reward: 119.76874539389534, Q Loss: 14707.530395507812, Actor Loss: -4458.62190246582
Episode 3939: Time: 0.3697397708892822, Total Reward: 314.7070491962129, Q Loss: 40982.815490722656, Actor Loss: -11559.034545898438
Episode 3940: Time: 0.296372652053833, Total Reward: 248.80301214743855, Q Loss: 32859.95184326172, Actor Loss: -9364.816772460938
Episode 3941: Time: 0.6752026081085205, Total Reward: 585.5688105859128, Q Loss: 68284.54113769531, Actor Loss: -20980.849349975586
Episode 3942: Time: 0.3273320198059082, Total Reward: 277.6447140456104, Q Loss: 34450.554931640625, Actor Loss: -10206.218811035156
Episode 3943: Time: 0.3493311405181885, Total Reward: 295.9488211789927, Q Loss: 37829.059631347656, Actor Loss: -10701.389556884766
Episode 3944: Time: 0.2751491069793701, Total Reward: 231.33702118797407, Q Loss: 30317.802795410156, Actor Loss: -8682.679748535156
Episode 3945: Time: 0.2225799560546875, Total Reward: 182.75653662164123, Q Loss: 25335.199768066406, Actor Loss: -6765.331024169922
Episode 3946: Time: 0.48650097846984863, Total Reward: 417.7950408838903, Q Loss: 49348.828063964844, Actor Loss: -15187.265426635742
Episode 3947: Time: 0.1590726375579834, Total Reward: 128.64617017491418, Q Loss: 15909.948120117188, Actor Loss: -5066.47265625
Episode 3948: Time: 0.4860243797302246, Total Reward: 416.07992398957504, Q Loss: 44357.305419921875, Actor Loss: -15282.319061279297
Episode 3949: Time: 0.12707185745239258, Total Reward: 100.12005444906934, Q Loss: 14024.213775634766, Actor Loss: -3998.383819580078
Episode 3950: Time: 0.09575653076171875, Total Reward: 72.6385232863832, Q Loss: 10487.191040039062, Actor Loss: -3002.16015625
Episode 3951: Time: 0.2117919921875, Total Reward: 174.3329106458549, Q Loss: 20589.09146118164, Actor Loss: -6580.1201171875
Episode 3952: Time: 0.19014358520507812, Total Reward: 156.06875182408763, Q Loss: 14472.91275024414, Actor Loss: -5732.227935791016
Episode 3953: Time: 0.09593725204467773, Total Reward: 72.11021302080273, Q Loss: 9124.471374511719, Actor Loss: -3042.6798095703125
Episode 3954: Time: 0.780787467956543, Total Reward: 678.525928345568, Q Loss: 77191.31506347656, Actor Loss: -24497.15805053711
Episode 3955: Time: 0.10592007637023926, Total Reward: 82.32727824349323, Q Loss: 11115.211059570312, Actor Loss: -3149.0489196777344
Episode 3956: Time: 0.37002062797546387, Total Reward: 314.53806374739537, Q Loss: 43259.125915527344, Actor Loss: -11942.750457763672
Episode 3957: Time: 0.30658602714538574, Total Reward: 258.3539023737822, Q Loss: 34002.74768066406, Actor Loss: -9573.458923339844
Episode 3958: Time: 0.454754114151001, Total Reward: 389.1600243456739, Q Loss: 47809.47561645508, Actor Loss: -14333.333312988281
Episode 3959: Time: 0.5494639873504639, Total Reward: 472.85613814912267, Q Loss: 60833.04443359375, Actor Loss: -17631.643966674805
Episode 3960: Time: 0.22254109382629395, Total Reward: 184.6102715670385, Q Loss: 25762.65789794922, Actor Loss: -7058.473449707031
Episode 3961: Time: 0.10602760314941406, Total Reward: 82.25223122665363, Q Loss: 12488.714172363281, Actor Loss: -3321.0624389648438
Episode 3962: Time: 0.42320966720581055, Total Reward: 360.50472206866283, Q Loss: 48783.25866699219, Actor Loss: -13708.420959472656
Episode 3963: Time: 0.14809060096740723, Total Reward: 119.4986260205526, Q Loss: 17744.758270263672, Actor Loss: -4687.532760620117
Episode 3964: Time: 0.1273801326751709, Total Reward: 100.61203987014791, Q Loss: 12803.590789794922, Actor Loss: -3877.23583984375

Episode 3965: Time: 0.1586461067199707, Total Reward: 128.91233608494383, Q Loss: 14672.885437011719, Actor Loss: -5020.350982666016
Episode 3966: Time: 0.5277302265167236, Total Reward: 452.2778695762166, Q Loss: 53151.67333984375, Actor Loss: -16906.696578979492
Episode 3967: Time: 0.3169405460357666, Total Reward: 266.9015947188083, Q Loss: 31582.79995727539, Actor Loss: -10235.595886230469
Episode 3968: Time: 0.3909010887145996, Total Reward: 330.1140559626102, Q Loss: 39047.572265625, Actor Loss: -12574.379455566406
Episode 3969: Time: 0.2854783535003662, Total Reward: 238.56186818148566, Q Loss: 30769.51531982422, Actor Loss: -9139.012023925781
Episode 3970: Time: 0.3385021686553955, Total Reward: 286.97339601245847, Q Loss: 34421.28366088867, Actor Loss: -10798.606750488281
Episode 3971: Time: 0.4637770652770996, Total Reward: 399.0479725493238, Q Loss: 51328.1125793457, Actor Loss: -14636.169036865234
Episode 3972: Time: 0.2645890712738037, Total Reward: 220.46756619189432, Q Loss: 28986.96014404297, Actor Loss: -8734.079986572266
Episode 3973: Time: 0.19005846977233887, Total Reward: 156.47744208929973, Q Loss: 19073.036376953125, Actor Loss: -6018.676239013672
Episode 3974: Time: 0.1483621597290039, Total Reward: 119.34772285928132, Q Loss: 16366.054748535156, Actor Loss: -4882.061676025391
Episode 3975: Time: 0.31702423095703125, Total Reward: 268.46136091339224, Q Loss: 34066.345642089844, Actor Loss: -10333.361877441406
Episode 3976: Time: 0.211561918258667, Total Reward: 175.46947349155988, Q Loss: 18831.05355834961, Actor Loss: -6812.898651123047
Episode 3977: Time: 0.4651973247528076, Total Reward: 398.07113135404876, Q Loss: 47991.460510253906, Actor Loss: -14925.629699707031
Episode 3978: Time: 0.2855994701385498, Total Reward: 241.02749305055175, Q Loss: 29550.435943603516, Actor Loss: -9260.434692382812
Episode 3979: Time: 0.15870022773742676, Total Reward: 128.6489649982819, Q Loss: 15449.080963134766, Actor Loss: -4942.8277587890625
Episode 3980: Time: 0.29587721824645996, Total Reward: 248.87760767512057, Q Loss: 32700.64324951172, Actor Loss: -9285.49380493164
Episode 3981: Time: 0.20164704322814941, Total Reward: 166.08979187930896, Q Loss: 23469.822875976562, Actor Loss: -6462.452606201172
Episode 3982: Time: 0.328136682510376, Total Reward: 277.4438522533616, Q Loss: 39532.615478515625, Actor Loss: -10689.995727539062
Episode 3983: Time: 0.26480770111083984, Total Reward: 221.91636681147503, Q Loss: 29444.899932861328, Actor Loss: -8184.414825439453
Episode 3984: Time: 0.3064002990722656, Total Reward: 258.5308758964469, Q Loss: 35735.13888549805, Actor Loss: -9559.455261230469
Episode 3985: Time: 0.22176170349121094, Total Reward: 183.10939240533713, Q Loss: 24504.42202758789, Actor Loss: -7058.649963378906
Episode 3986: Time: 0.14866328239440918, Total Reward: 119.32118864644053, Q Loss: 14558.992797851562, Actor Loss: -4715.546722412109
Episode 3987: Time: 0.23266291618347168, Total Reward: 192.79715070944997, Q Loss: 24398.890167236328, Actor Loss: -7481.573425292969
Episode 3988: Time: 0.24415922164916992, Total Reward: 203.34380617254163, Q Loss: 28094.099609375, Actor Loss: -8026.171325683594
Episode 3989: Time: 0.32964539527893066, Total Reward: 274.93948912420365, Q Loss: 31317.318115234375, Actor Loss: -10538.396026611328
Episode 3990: Time: 0.2546086311340332, Total Reward: 210.047353295672, Q Loss: 25693.837493896484, Actor Loss: -7979.221618652344
Episode 3991: Time: 0.2445058822631836, Total Reward: 203.4593772784641, Q Loss: 30396.525939941406, Actor Loss: -7981.527679443359
Episode 3992: Time: 0.29714226722717285, Total Reward: 248.60094714603635, Q Loss: 35618.83181762695, Actor Loss: -9566.61196899414

Episode 3993: Time: 0.4340078830718994, Total Reward: 370.85275128313333, Q Loss: 44652.1142578125, Actor Loss: -13904.41162109375
Episode 3994: Time: 0.27530455589294434, Total Reward: 230.09614587834633, Q Loss: 29046.463806152344, Actor Loss: -8832.777862548828
Episode 3995: Time: 0.179595947265625, Total Reward: 147.46909404410425, Q Loss: 16694.40301513672, Actor Loss: -5822.891906738281
Episode 3996: Time: 0.1696760654449463, Total Reward: 138.22569529263853, Q Loss: 20545.975036621094, Actor Loss: -5541.444763183594
Episode 3997: Time: 0.21197986602783203, Total Reward: 174.97294626047216, Q Loss: 22259.91748046875, Actor Loss: -7056.881317138672
Episode 3998: Time: 0.16946148872375488, Total Reward: 137.49307164170415, Q Loss: 19553.64727783203, Actor Loss: -5677.414215087891
Episode 3999: Time: 0.12751197814941406, Total Reward: 100.76228869469831, Q Loss: 12805.18002319336, Actor Loss: -4038.604034423828
Validation Mean: 500.66037100313565, Validation Std: 85.25244016894577
saving model
Episode 4000: Time: 0.44537830352783203, Total Reward: 378.5298962149952, Q Loss: 53388.05676269531, Actor Loss: -14576.638305664062
Episode 4001: Time: 0.561272144317627, Total Reward: 481.6023230049979, Q Loss: 55882.17248535156, Actor Loss: -18108.281661987305
Episode 4002: Time: 0.44413018226623535, Total Reward: 380.35498075032535, Q Loss: 53598.66632080078, Actor Loss: -14575.401153564453
Episode 4003: Time: 0.13742399215698242, Total Reward: 110.4761185548052, Q Loss: 19257.73046875, Actor Loss: -4504.267547607422
Episode 4004: Time: 0.30712175369262695, Total Reward: 258.67105693730036, Q Loss: 33125.89862060547, Actor Loss: -10064.068542480469
Episode 4005: Time: 0.3923976421356201, Total Reward: 332.37022443558953, Q Loss: 44865.62545776367, Actor Loss: -12921.220230102539
Episode 4006: Time: 0.15924906730651855, Total Reward: 128.44681264113, Q Loss: 19309.630767822266, Actor Loss: -5222.0965576171875
Episode 4007: Time: 0.561246395111084, Total Reward: 482.60446567259174, Q Loss: 64598.757720947266, Actor Loss: -18022.775421142578
Episode 4008: Time: 0.6241641044616699, Total Reward: 538.0363842843694, Q Loss: 66178.33056640625, Actor Loss: -20435.27850341797
Episode 4009: Time: 0.24414348602294922, Total Reward: 203.06289001199556, Q Loss: 28912.901916503906, Actor Loss: -7967.094940185547
Episode 4010: Time: 0.26508378982543945, Total Reward: 220.69810843155201, Q Loss: 28676.79669189453, Actor Loss: -8986.078308105469
Episode 4011: Time: 0.28625011444091797, Total Reward: 239.37994244579536, Q Loss: 33552.333435058594, Actor Loss: -9460.654022216797
Episode 4012: Time: 0.12766408920288086, Total Reward: 100.7051243313671, Q Loss: 16417.828247070312, Actor Loss: -4196.1597900390625
Episode 4013: Time: 0.26491594314575195, Total Reward: 222.10079968152812, Q Loss: 26943.505004882812, Actor Loss: -8493.766479492188
Episode 4014: Time: 0.25486040115356445, Total Reward: 210.82456194663152, Q Loss: 30412.741821289062, Actor Loss: -8564.105194091797
Episode 4015: Time: 0.3074643611907959, Total Reward: 258.2161104305189, Q Loss: 37849.87939453125, Actor Loss: -10055.82388305664
Episode 4016: Time: 0.13785386085510254, Total Reward: 110.13487250065619, Q Loss: 15373.998046875, Actor Loss: -4504.771942138672
Episode 4017: Time: 0.20163512229919434, Total Reward: 165.77075393679306, Q Loss: 25249.21990966797, Actor Loss: -6539.483673095703
Episode 4018: Time: 0.7932817935943604, Total Reward: 685.2409270449851, Q Loss: 89678.95687866211, Actor Loss: -26527.74755859375
Episode 4019: Time: 0.21241164207458496, Total Reward: 175.73954830142674, Q Loss: 25201.117584228516, Actor Loss: -7085.220230102539

Episode 4020: Time: 0.3499281406402588, Total Reward: 296.57172506515747, Q Loss: 42007.72790527344, Actor Loss: -11541.534606933594
Episode 4021: Time: 0.27587103843688965, Total Reward: 230.4165035758017, Q Loss: 31800.346313476562, Actor Loss: -9336.763610839844
Episode 4022: Time: 0.2446730136871338, Total Reward: 201.88916423564402, Q Loss: 28292.837188720703, Actor Loss: -8150.3106689453125
Episode 4023: Time: 0.4451780319213867, Total Reward: 377.7296977717253, Q Loss: 54638.21307373047, Actor Loss: -14580.996063232422
Episode 4024: Time: 0.5815157890319824, Total Reward: 501.1098310784461, Q Loss: 70753.49591064453, Actor Loss: -19184.554412841797
Episode 4025: Time: 0.6131482124328613, Total Reward: 528.2854871892511, Q Loss: 71672.92724609375, Actor Loss: -20530.45770263672
Episode 4026: Time: 0.39147186279296875, Total Reward: 333.6129332227782, Q Loss: 41559.688049316406, Actor Loss: -12927.973937988281
Episode 4027: Time: 0.09554553031921387, Total Reward: 72.02068021180476, Q Loss: 11269.164123535156, Actor Loss: -3228.758056640625
Episode 4028: Time: 0.4241335391998291, Total Reward: 359.4764419499325, Q Loss: 43711.87380981445, Actor Loss: -14205.396392822266
Episode 4029: Time: 0.47751832008361816, Total Reward: 404.9472296293258, Q Loss: 61424.023864746094, Actor Loss: -15511.646667480469
Episode 4030: Time: 0.212646484375, Total Reward: 175.4411725991425, Q Loss: 25472.376403808594, Actor Loss: -6946.17138671875
Episode 4031: Time: 0.24440240859985352, Total Reward: 202.69891031160802, Q Loss: 27447.31622314453, Actor Loss: -8106.562896728516
Episode 4032: Time: 0.3084831237792969, Total Reward: 258.5839285856498, Q Loss: 31129.866760253906, Actor Loss: -10158.897933959961
Episode 4033: Time: 0.2974574565887451, Total Reward: 247.8753541999883, Q Loss: 39063.33740234375, Actor Loss: -9745.752471923828
Episode 4034: Time: 0.3920783996582031, Total Reward: 333.85544847688874, Q Loss: 43445.005920410156, Actor Loss: -12825.982971191406
Episode 4035: Time: 0.265547513961792, Total Reward: 219.73050722805775, Q Loss: 34380.70635986328, Actor Loss: -9037.190795898438
Episode 4036: Time: 0.4780256748199463, Total Reward: 405.3861059366002, Q Loss: 57588.982421875, Actor Loss: -16349.85092163086
Episode 4037: Time: 0.5301885604858398, Total Reward: 454.8400047446692, Q Loss: 68340.63165283203, Actor Loss: -17447.679321289062
Episode 4038: Time: 0.2869222164154053, Total Reward: 239.071989295754, Q Loss: 36290.298400878906, Actor Loss: -9706.188598632812
Episode 4039: Time: 0.1276719570159912, Total Reward: 100.45077613445247, Q Loss: 16045.653686523438, Actor Loss: -4219.0150146484375
Episode 4040: Time: 0.32889676094055176, Total Reward: 276.0836490068706, Q Loss: 41749.13232421875, Actor Loss: -10834.633880615234
Episode 4041: Time: 0.18047738075256348, Total Reward: 147.52678231234364, Q Loss: 20204.673095703125, Actor Loss: -6242.157867431641
Episode 4042: Time: 0.4353468418121338, Total Reward: 368.97507437820894, Q Loss: 53842.080322265625, Actor Loss: -14555.514251708984
Episode 4043: Time: 0.24466204643249512, Total Reward: 201.7186650152125, Q Loss: 27880.1376953125, Actor Loss: -8146.234954833984
Episode 4044: Time: 0.20209217071533203, Total Reward: 165.7323895770995, Q Loss: 21173.303100585938, Actor Loss: -6763.242980957031
Episode 4045: Time: 0.10644221305847168, Total Reward: 81.92734670808132, Q Loss: 13074.563354492188, Actor Loss: -3605.9160766601562
Episode 4046: Time: 0.5296931266784668, Total Reward: 453.62983023705294, Q Loss: 57880.979064941406, Actor Loss: -17748.973114013672
Episode 4047: Time: 0.24431848526000977, Total Reward: 201.89235650947083, Q Loss: 29163.55157470703, Actor Loss: -8335.421356201172

Episode 4048: Time: 0.34999656677246094, Total Reward: 296.00686391198496, Q Loss: 38867.15466308594, Actor Loss: -12027.414764404297
Episode 4049: Time: 0.37162089347839355, Total Reward: 314.0619580601417, Q Loss: 44409.40246582031, Actor Loss: -12535.437316894531
Episode 4050: Time: 0.45563554763793945, Total Reward: 387.17297343352595, Q Loss: 49976.37097167969, Actor Loss: -15716.819946289062
Episode 4051: Time: 0.12737274169921875, Total Reward: 100.94523136003609, Q Loss: 16314.305053710938, Actor Loss: -4416.234466552734
Episode 4052: Time: 0.3709280490875244, Total Reward: 313.40887023811894, Q Loss: 49503.350036621094, Actor Loss: -12957.467468261719
Episode 4053: Time: 0.28682971000671387, Total Reward: 237.91832466623498, Q Loss: 42479.880432128906, Actor Loss: -9841.32681274414
Episode 4054: Time: 0.6778335571289062, Total Reward: 583.8440875714185, Q Loss: 95713.94610595703, Actor Loss: -23186.915740966797
Episode 4055: Time: 0.22329092025756836, Total Reward: 183.07032020012096, Q Loss: 31201.209594726562, Actor Loss: -7604.763275146484
Episode 4056: Time: 0.276364803314209, Total Reward: 230.00022249920133, Q Loss: 31648.12515258789, Actor Loss: -9334.561645507812
Episode 4057: Time: 0.09572291374206543, Total Reward: 72.40178156542945, Q Loss: 11998.942657470703, Actor Loss: -3254.4947814941406
Episode 4058: Time: 0.1807854175567627, Total Reward: 145.96759697492297, Q Loss: 23138.205200195312, Actor Loss: -6135.445281982422
Episode 4059: Time: 0.2973763942718506, Total Reward: 249.64328093201559, Q Loss: 39822.88214111328, Actor Loss: -10144.071594238281
Episode 4060: Time: 0.12743020057678223, Total Reward: 100.55993020805971, Q Loss: 15235.24658203125, Actor Loss: -4465.717132568359
Episode 4061: Time: 0.21259379386901855, Total Reward: 172.5946459466227, Q Loss: 24444.25213623047, Actor Loss: -7314.493133544922
Episode 4062: Time: 0.1913290023803711, Total Reward: 156.81629816223384, Q Loss: 22076.080444335938, Actor Loss: -6380.791290283203
Episode 4063: Time: 0.3080005645751953, Total Reward: 256.8261223621313, Q Loss: 37823.505615234375, Actor Loss: -10309.607818603516
Episode 4064: Time: 0.1696760654449463, Total Reward: 138.49899542819472, Q Loss: 20891.78436279297, Actor Loss: -5773.8477783203125
Episode 4065: Time: 0.32845354080200195, Total Reward: 277.1727932403837, Q Loss: 37132.1999206543, Actor Loss: -11049.526489257812
Episode 4066: Time: 0.39191317558288574, Total Reward: 334.3026055130613, Q Loss: 44981.84292602539, Actor Loss: -13286.825469970703
Episode 4067: Time: 0.5817627906799316, Total Reward: 501.9518766211264, Q Loss: 74536.89782714844, Actor Loss: -20334.963134765625
Episode 4068: Time: 0.5604374408721924, Total Reward: 481.94454056351196, Q Loss: 69883.01586914062, Actor Loss: -19421.120330810547
Episode 4069: Time: 0.32875752449035645, Total Reward: 277.57996334865084, Q Loss: 40036.33135986328, Actor Loss: -11381.66909790039
Episode 4070: Time: 0.30741167068481445, Total Reward: 257.295494093685, Q Loss: 40987.797119140625, Actor Loss: -10859.486389160156
Episode 4071: Time: 0.1809244155883789, Total Reward: 147.75756715615606, Q Loss: 24878.378479003906, Actor Loss: -6394.003021240234
Episode 4072: Time: 0.666743278503418, Total Reward: 574.0457278618038, Q Loss: 87500.42974853516, Actor Loss: -23756.940216064453
Episode 4073: Time: 0.4557502269744873, Total Reward: 386.6107732534789, Q Loss: 60524.690002441406, Actor Loss: -16036.409790039062
Episode 4074: Time: 0.40413761138916016, Total Reward: 341.1975740709727, Q Loss: 48071.94708251953, Actor Loss: -14210.833709716797
Episode 4075: Time: 0.12757372856140137, Total Reward: 100.35962022800199, Q Loss: 14695.934265136719, Actor Loss: -4532.990234375

Episode 4076: Time: 0.21358656883239746, Total Reward: 174.50071118993463, Q Loss: 24915.937133789062, Actor Loss: -7436.691680908203
Episode 4077: Time: 0.30914974212646484, Total Reward: 258.528803958276, Q Loss: 37493.74365234375, Actor Loss: -10485.823486328125
Episode 4078: Time: 0.2448577880859375, Total Reward: 203.66987417716314, Q Loss: 30236.44110107422, Actor Loss: -8572.130889892578
Episode 4079: Time: 0.2554507255554199, Total Reward: 210.10327225960006, Q Loss: 33777.685485839844, Actor Loss: -9071.593505859375
Episode 4080: Time: 0.22325873374938965, Total Reward: 183.93501192525449, Q Loss: 29699.469604492188, Actor Loss: -7790.433807373047
Episode 4081: Time: 0.13841867446899414, Total Reward: 109.95234316483973, Q Loss: 20327.910705566406, Actor Loss: -4965.914520263672
Episode 4082: Time: 0.09605765342712402, Total Reward: 72.39929594907579, Q Loss: 10442.19921875, Actor Loss: -3262.7442932128906
Episode 4083: Time: 0.3080751895904541, Total Reward: 257.1293235779693, Q Loss: 39253.865661621094, Actor Loss: -10695.26693725586
Episode 4084: Time: 0.44553065299987793, Total Reward: 379.71506469699085, Q Loss: 57430.72442626953, Actor Loss: -15306.674224853516
Episode 4085: Time: 0.11690759658813477, Total Reward: 91.5507600817847, Q Loss: 15347.232971191406, Actor Loss: -4146.325469970703
Episode 4086: Time: 0.31754326820373535, Total Reward: 267.58975078259243, Q Loss: 45197.208557128906, Actor Loss: -11352.962677001953
Episode 4087: Time: 0.3295736312866211, Total Reward: 277.26084297016024, Q Loss: 44923.93957519531, Actor Loss: -11486.362854003906
Episode 4088: Time: 0.1590726375579834, Total Reward: 128.954995810857, Q Loss: 27232.583862304688, Actor Loss: -5574.7930908203125
Episode 4089: Time: 0.138336181640625, Total Reward: 110.02271212172302, Q Loss: 19492.23223876953, Actor Loss: -4895.516387939453
Episode 4090: Time: 0.39272403717041016, Total Reward: 332.71940774506487, Q Loss: 44365.54620361328, Actor Loss: -13963.041473388672
Episode 4091: Time: 0.12774348258972168, Total Reward: 100.97456020119652, Q Loss: 15554.5029296875, Actor Loss: -4429.001007080078
Episode 4092: Time: 0.14903926849365234, Total Reward: 119.35196116453714, Q Loss: 18907.749145507812, Actor Loss: -5169.177490234375
Episode 4093: Time: 0.27645206451416016, Total Reward: 229.33810696443499, Q Loss: 40040.10607910156, Actor Loss: -9748.970672607422
Episode 4094: Time: 0.5938019752502441, Total Reward: 509.28554103424375, Q Loss: 75295.9033203125, Actor Loss: -21121.126983642578
Episode 4095: Time: 0.13818955421447754, Total Reward: 110.00082478647464, Q Loss: 16826.01446533203, Actor Loss: -4647.476287841797
Episode 4096: Time: 0.39349937438964844, Total Reward: 330.9594577847752, Q Loss: 44114.090881347656, Actor Loss: -14105.387878417969
Episode 4097: Time: 0.7529077529907227, Total Reward: 649.3793111639317, Q Loss: 98802.84286499023, Actor Loss: -27072.635681152344
Episode 4098: Time: 0.4246644973754883, Total Reward: 360.52806947523726, Q Loss: 53964.501403808594, Actor Loss: -14609.43862915039
Episode 4099: Time: 0.22356581687927246, Total Reward: 185.2747205754686, Q Loss: 30508.411987304688, Actor Loss: -7739.287200927734
Validation Mean: 659.3722639257551, Validation Std: 51.97543425289989
saving model
Episode 4100: Time: 0.23569965362548828, Total Reward: 193.52194047378524, Q Loss: 28217.06219482422, Actor Loss: -8218.534790039062
Episode 4101: Time: 0.21355080604553223, Total Reward: 175.92545937731867, Q Loss: 25468.392700195312, Actor Loss: -7261.586730957031
Episode 4102: Time: 0.8176124095916748, Total Reward: 706.4737594587771, Q Loss: 110277.5327758789, Actor Loss: -28992.278869628906

Episode 4103: Time: 0.4248692989349365, Total Reward: 359.2464978964197, Q Loss: 52314.06719970703, Actor Loss: -15334.744995117188
Episode 4104: Time: 0.5412170886993408, Total Reward: 464.3375351351393, Q Loss: 72785.81640625, Actor Loss: -19593.52215576172
Episode 4105: Time: 0.297778844833374, Total Reward: 247.6480678243833, Q Loss: 40542.2548828125, Actor Loss: -10691.132507324219
Episode 4106: Time: 0.26611876487731934, Total Reward: 220.75721784194232, Q Loss: 38502.412170410156, Actor Loss: -9705.059143066406
Episode 4107: Time: 0.5210633277893066, Total Reward: 445.42649600176753, Q Loss: 67733.62994384766, Actor Loss: -18780.255157470703
Episode 4108: Time: 0.40373778343200684, Total Reward: 343.142639753178, Q Loss: 50574.207275390625, Actor Loss: -14544.491119384766
Episode 4109: Time: 0.37303757667541504, Total Reward: 314.8325128415982, Q Loss: 51928.4560546875, Actor Loss: -13421.044219970703
Episode 4110: Time: 0.0855109691619873, Total Reward: 62.94403760144101, Q Loss: 11263.380065917969, Actor Loss: -3167.9981689453125
Episode 4111: Time: 0.20229148864746094, Total Reward: 165.2088122219746, Q Loss: 26623.85140991211, Actor Loss: -7263.9996337890625
Episode 4112: Time: 0.3519914150238037, Total Reward: 295.3598893680252, Q Loss: 49232.165283203125, Actor Loss: -12988.037292480469
Episode 4113: Time: 0.42615818977355957, Total Reward: 361.1585004582174, Q Loss: 56920.584899902344, Actor Loss: -15543.043823242188
Episode 4114: Time: 0.4052906036376953, Total Reward: 342.85034180745794, Q Loss: 61209.48403930664, Actor Loss: -14584.363464355469
Episode 4115: Time: 0.0963282585144043, Total Reward: 72.66200185505684, Q Loss: 15046.828857421875, Actor Loss: -3592.1784057617188
Episode 4116: Time: 0.25583791732788086, Total Reward: 211.37503438606575, Q Loss: 30633.579833984375, Actor Loss: -9083.765350341797
Episode 4117: Time: 0.09619283676147461, Total Reward: 72.86700220456166, Q Loss: 14962.906616210938, Actor Loss: -3408.889434814453
Episode 4118: Time: 0.5320241451263428, Total Reward: 453.9738470509968, Q Loss: 76256.3530883789, Actor Loss: -19585.409423828125
Episode 4119: Time: 0.11726832389831543, Total Reward: 90.48364801181286, Q Loss: 14629.266357421875, Actor Loss: -4177.294891357422
Episode 4120: Time: 0.21288633346557617, Total Reward: 175.634117356386, Q Loss: 30004.321838378906, Actor Loss: -7785.310791015625
Episode 4121: Time: 0.2663917541503906, Total Reward: 220.9930805855207, Q Loss: 36394.18389892578, Actor Loss: -9637.832641601562
Episode 4122: Time: 0.3191993236541748, Total Reward: 267.9631887456239, Q Loss: 45338.58154296875, Actor Loss: -11540.001068115234
Episode 4123: Time: 0.3403182029724121, Total Reward: 285.77880999982057, Q Loss: 51426.66488647461, Actor Loss: -12282.216796875
Episode 4124: Time: 0.21299362182617188, Total Reward: 174.11569671785438, Q Loss: 31762.35369873047, Actor Loss: -7509.114837646484
Episode 4125: Time: 0.180952787399292, Total Reward: 147.46288274968447, Q Loss: 26746.864990234375, Actor Loss: -6653.419036865234
Episode 4126: Time: 0.13849997520446777, Total Reward: 110.42742025735207, Q Loss: 17056.16323852539, Actor Loss: -4992.756042480469
Episode 4127: Time: 0.14870476722717285, Total Reward: 119.12538948661265, Q Loss: 21937.658569335938, Actor Loss: -5420.462097167969
Episode 4128: Time: 0.18088173866271973, Total Reward: 147.8249460843431, Q Loss: 22853.480102539062, Actor Loss: -6577.750335693359
Episode 4129: Time: 0.2022230625152588, Total Reward: 166.18194111149927, Q Loss: 27213.901885986328, Actor Loss: -7455.821258544922
Episode 4130: Time: 0.13844585418701172, Total Reward: 110.62668440182942, Q Loss: 20450.647827148438, Actor Loss: -5032.228576660156

Episode 4131: Time: 0.13851118087768555, Total Reward: 110.10537699402184, Q Loss: 17445.66534423828, Actor Loss: -4994.574768066406
Episode 4132: Time: 0.6268081665039062, Total Reward: 538.6234578279965, Q Loss: 86259.06616210938, Actor Loss: -22730.068145751953
Episode 4133: Time: 0.28731513023376465, Total Reward: 238.91898069572048, Q Loss: 34706.6513671875, Actor Loss: -10379.426086425781
Episode 4134: Time: 0.3296394348144531, Total Reward: 275.27711776836645, Q Loss: 47367.52960205078, Actor Loss: -12033.177825927734
Episode 4135: Time: 0.5098280906677246, Total Reward: 436.0584299355081, Q Loss: 63523.86410522461, Actor Loss: -18678.432037353516
Episode 4136: Time: 0.22353434562683105, Total Reward: 182.73256036270317, Q Loss: 39602.19940185547, Actor Loss: -8162.285430908203
Episode 4137: Time: 0.22342991828918457, Total Reward: 183.97652539129774, Q Loss: 30681.059936523438, Actor Loss: -7967.300628662109
Episode 4138: Time: 0.2980821132659912, Total Reward: 248.35218703973248, Q Loss: 44857.99044799805, Actor Loss: -10783.126159667969
Episode 4139: Time: 0.2234182357788086, Total Reward: 182.58367336698603, Q Loss: 38808.403869628906, Actor Loss: -8127.543243408203
Episode 4140: Time: 0.31956934928894043, Total Reward: 267.83079386190093, Q Loss: 49849.72119140625, Actor Loss: -11427.022705078125
Episode 4141: Time: 0.16997957229614258, Total Reward: 136.60817854332996, Q Loss: 23547.472595214844, Actor Loss: -6202.173370361328
Episode 4142: Time: 0.24458527565002441, Total Reward: 202.25340734453644, Q Loss: 30615.345153808594, Actor Loss: -8879.149810791016
Episode 4143: Time: 0.2550640106201172, Total Reward: 211.87372638264196, Q Loss: 35557.55322265625, Actor Loss: -9627.58578491211
Episode 4144: Time: 0.10650062561035156, Total Reward: 82.29359066238604, Q Loss: 13841.753173828125, Actor Loss: -4017.070281982422
Episode 4145: Time: 0.24465417861938477, Total Reward: 202.88253119169727, Q Loss: 30002.14129638672, Actor Loss: -8769.793670654297
Episode 4146: Time: 0.149522066116333, Total Reward: 119.02076661715775, Q Loss: 22132.597229003906, Actor Loss: -5422.282958984375
Episode 4147: Time: 0.30832552909851074, Total Reward: 259.6318248757875, Q Loss: 37602.8857421875, Actor Loss: -11466.588836669922
Episode 4148: Time: 0.605412483215332, Total Reward: 519.4684086282786, Q Loss: 87279.34466552734, Actor Loss: -22098.477478027344
Episode 4149: Time: 0.2972695827484131, Total Reward: 249.82092496581507, Q Loss: 44202.722595214844, Actor Loss: -11208.996551513672
Episode 4150: Time: 0.17052555084228516, Total Reward: 137.9123494125529, Q Loss: 25796.11456298828, Actor Loss: -6400.888122558594
Episode 4151: Time: 0.09626364707946777, Total Reward: 72.48379071318335, Q Loss: 14410.18603515625, Actor Loss: -3497.988311767578
Episode 4152: Time: 0.20227313041687012, Total Reward: 164.45881274251445, Q Loss: 39197.584533691406, Actor Loss: -7521.230285644531
Episode 4153: Time: 0.31882691383361816, Total Reward: 267.8115512768451, Q Loss: 44102.10900878906, Actor Loss: -11580.0361328125
Episode 4154: Time: 0.2666032314300537, Total Reward: 222.2401870353589, Q Loss: 41847.68017578125, Actor Loss: -10286.196105957031
Episode 4155: Time: 0.3934504985809326, Total Reward: 333.0175885760749, Q Loss: 48687.83740234375, Actor Loss: -14724.645782470703
Episode 4156: Time: 0.20223450660705566, Total Reward: 166.5766951178905, Q Loss: 30192.902557373047, Actor Loss: -7401.2628173828125
Episode 4157: Time: 0.351409912109375, Total Reward: 294.4863204749141, Q Loss: 43152.88684082031, Actor Loss: -12780.540313720703
Episode 4158: Time: 0.20222783088684082, Total Reward: 166.40034024419597, Q Loss: 31323.342407226562, Actor Loss: -7522.871337890625

Episode 4159: Time: 0.1382608413696289, Total Reward: 110.25144013814273, Q Loss: 17113.646362304688, Actor Loss: -5109.734130859375
Episode 4160: Time: 0.33989429473876953, Total Reward: 286.78831327842084, Q Loss: 48201.23376464844, Actor Loss: -12885.619689941406
Episode 4161: Time: 0.18069076538085938, Total Reward: 146.9432309697196, Q Loss: 24532.78631591797, Actor Loss: -6816.9114990234375
Episode 4162: Time: 0.5518488883972168, Total Reward: 473.3429528466623, Q Loss: 76292.91998291016, Actor Loss: -20328.553436279297
Episode 4163: Time: 0.3829023838043213, Total Reward: 320.3292310019714, Q Loss: 53655.45361328125, Actor Loss: -14198.043060302734
Episode 4164: Time: 0.23459148406982422, Total Reward: 194.10381683457032, Q Loss: 32699.789672851562, Actor Loss: -8238.573303222656
Episode 4165: Time: 1.0838217735290527, Total Reward: 939.4789217000751, Q Loss: 172873.6381225586, Actor Loss: -40694.45642089844
Episode 4166: Time: 0.07474827766418457, Total Reward: 53.48976277635235, Q Loss: 10975.909912109375, Actor Loss: -2718.3170776367188
Episode 4167: Time: 0.39380526542663574, Total Reward: 333.6222784444019, Q Loss: 60597.320373535156, Actor Loss: -14822.17251586914
Episode 4168: Time: 0.309520959854126, Total Reward: 257.49349230980766, Q Loss: 42112.504455566406, Actor Loss: -11639.480194091797
Episode 4169: Time: 0.41620588302612305, Total Reward: 349.2793572313504, Q Loss: 62176.65100097656, Actor Loss: -15643.188995361328
Episode 4170: Time: 0.11777710914611816, Total Reward: 91.30672304469854, Q Loss: 16097.038391113281, Actor Loss: -4239.564208984375
Episode 4171: Time: 0.35175037384033203, Total Reward: 294.2366884819333, Q Loss: 52201.904235839844, Actor Loss: -13322.003967285156
Episode 4172: Time: 0.14903688430786133, Total Reward: 119.37549001314706, Q Loss: 19311.348571777344, Actor Loss: -5547.358184814453
Episode 4173: Time: 0.20241332054138184, Total Reward: 166.10725502165016, Q Loss: 28293.227905273438, Actor Loss: -7649.508636474609
Episode 4174: Time: 0.14922022819519043, Total Reward: 119.84923007457182, Q Loss: 19293.336639404297, Actor Loss: -5612.775238037109
Episode 4175: Time: 0.2556936740875244, Total Reward: 212.38763321799394, Q Loss: 39242.34881591797, Actor Loss: -9324.548797607422
Episode 4176: Time: 0.234818696975708, Total Reward: 192.2045649185472, Q Loss: 28620.985229492188, Actor Loss: -8783.127227783203
Episode 4177: Time: 0.21381855010986328, Total Reward: 174.04605728462647, Q Loss: 32629.152099609375, Actor Loss: -7840.735107421875
Episode 4178: Time: 0.1597883701324463, Total Reward: 128.5635172202489, Q Loss: 29614.605590820312, Actor Loss: -5913.3206787109375
Episode 4179: Time: 0.5107879638671875, Total Reward: 434.88233878889446, Q Loss: 79949.73999023438, Actor Loss: -19629.521270751953
Episode 4180: Time: 0.25616908073425293, Total Reward: 212.85112466629602, Q Loss: 40423.91680908203, Actor Loss: -9897.121276855469
Episode 4181: Time: 0.1492767333984375, Total Reward: 119.30881377285513, Q Loss: 26104.0380859375, Actor Loss: -5679.799377441406
Episode 4182: Time: 0.17087721824645996, Total Reward: 138.1100556946186, Q Loss: 24394.806762695312, Actor Loss: -6627.59033203125
Episode 4183: Time: 0.18109726905822754, Total Reward: 147.81889731249242, Q Loss: 25767.123046875, Actor Loss: -6788.057312011719
Episode 4184: Time: 0.13881254196166992, Total Reward: 109.99186085217995, Q Loss: 23606.819091796875, Actor Loss: -5250.477691650391
Episode 4185: Time: 0.330066442489624, Total Reward: 276.27745555011296, Q Loss: 53058.68377685547, Actor Loss: -12518.113067626953
Episode 4186: Time: 0.4996328353881836, Total Reward: 427.2618378587572, Q Loss: 75322.51159667969, Actor Loss: -19486.352142333984

Episode 4187: Time: 0.18112492561340332, Total Reward: 147.0039372389371, Q Loss: 27466.941040039062, Actor Loss: -6896.186778095703
Episode 4188: Time: 0.29811668395996094, Total Reward: 249.0315670733905, Q Loss: 42218.13000488281, Actor Loss: -11551.134063720703
Episode 4189: Time: 0.3408389091491699, Total Reward: 286.5297874839154, Q Loss: 54511.97900390625, Actor Loss: -12874.932006835938
Episode 4190: Time: 0.21321725845336914, Total Reward: 175.2185947449903, Q Loss: 31199.98583984375, Actor Loss: -7834.1669921875
Episode 4191: Time: 0.2876591682434082, Total Reward: 239.39866672334804, Q Loss: 49066.35565185547, Actor Loss: -11159.611572265625
Episode 4192: Time: 0.3297145366668701, Total Reward: 278.24530702872516, Q Loss: 55378.96240234375, Actor Loss: -12332.68032836914
Episode 4193: Time: 0.3405933380126953, Total Reward: 287.15005495671517, Q Loss: 52404.40100097656, Actor Loss: -13268.747283935547
Episode 4194: Time: 0.6695504188537598, Total Reward: 574.6112787513501, Q Loss: 99469.11083984375, Actor Loss: -25536.112823486328
Episode 4195: Time: 0.39423298835754395, Total Reward: 332.65149368800803, Q Loss: 60780.34094238281, Actor Loss: -15183.132202148438
Episode 4196: Time: 0.3831627368927002, Total Reward: 324.97497284838636, Q Loss: 56239.59851074219, Actor Loss: -14488.144561767578
Episode 4197: Time: 0.2561516761779785, Total Reward: 211.48415228130474, Q Loss: 36534.177001953125, Actor Loss: -9715.78939819336
Episode 4198: Time: 0.12845635414123535, Total Reward: 100.0349640059832, Q Loss: 19115.95928955078, Actor Loss: -4706.5458984375
Episode 4199: Time: 0.49024295806884766, Total Reward: 416.2074536471515, Q Loss: 76784.21453857422, Actor Loss: -19218.063873291016
Validation Mean: 9353.188337411573, Validation Std: 0.1471044258033916
saving model
Episode 4200: Time: 0.16146612167358398, Total Reward: 128.56190447625366, Q Loss: 21965.69659423828, Actor Loss: -6136.3612060546875
Episode 4201: Time: 0.2786598205566406, Total Reward: 230.54106942988687, Q Loss: 39312.85009765625, Actor Loss: -10475.84701538086
Episode 4202: Time: 0.21390390396118164, Total Reward: 175.68297061402376, Q Loss: 37543.16857910156, Actor Loss: -8049.846221923828
Episode 4203: Time: 0.27786874771118164, Total Reward: 231.35661262795534, Q Loss: 42620.202880859375, Actor Loss: -10739.903930664062
Episode 4204: Time: 0.14957189559936523, Total Reward: 119.43593474451046, Q Loss: 25997.279174804688, Actor Loss: -5729.4219970703125
Episode 4205: Time: 0.08610296249389648, Total Reward: 62.92363500654332, Q Loss: 12128.655151367188, Actor Loss: -3267.434356689453
Episode 4206: Time: 0.3411853313446045, Total Reward: 286.4150538910085, Q Loss: 50466.676513671875, Actor Loss: -13130.840911865234
Episode 4207: Time: 0.32033705711364746, Total Reward: 268.9400833372525, Q Loss: 44244.101165771484, Actor Loss: -11769.73583984375
Episode 4208: Time: 0.266707181930542, Total Reward: 221.06315226812845, Q Loss: 34970.40216064453, Actor Loss: -10267.390747070312
Episode 4209: Time: 0.22440528869628906, Total Reward: 184.39069481729155, Q Loss: 39489.32452392578, Actor Loss: -8709.240753173828
Episode 4210: Time: 0.36243581771850586, Total Reward: 304.82174626077506, Q Loss: 62120.7763671875, Actor Loss: -14023.234344482422
Episode 4211: Time: 0.5642509460449219, Total Reward: 483.40590667297243, Q Loss: 81975.13073730469, Actor Loss: -21732.527099609375
Episode 4212: Time: 0.36219000816345215, Total Reward: 305.5263998778331, Q Loss: 53870.76336669922, Actor Loss: -14344.848052978516
Episode 4213: Time: 0.2987215518951416, Total Reward: 246.8888209630032, Q Loss: 43681.573791503906, Actor Loss: -11616.894470214844

Episode 4214: Time: 0.11750388145446777, Total Reward: 90.9482540666799, Q Loss: 14877.071533203125, Actor Loss: -4467.025787353516
Episode 4215: Time: 0.2563188076019287, Total Reward: 212.07263698851497, Q Loss: 40959.778076171875, Actor Loss: -10105.127563476562
Episode 4216: Time: 0.2664921283721924, Total Reward: 222.43919940511256, Q Loss: 37941.61608886719, Actor Loss: -10392.77914428711
Episode 4217: Time: 0.42595767974853516, Total Reward: 361.50666103881946, Q Loss: 69222.77157592773, Actor Loss: -16534.84927368164
Episode 4218: Time: 0.5111508369445801, Total Reward: 435.87000888826094, Q Loss: 82262.66418457031, Actor Loss: -20276.279235839844
Episode 4219: Time: 0.27795910835266113, Total Reward: 229.2010244394903, Q Loss: 43713.82995605469, Actor Loss: -10777.457489013672
Episode 4220: Time: 0.40524935722351074, Total Reward: 342.15396350670215, Q Loss: 60699.85873413086, Actor Loss: -15931.40151977539
Episode 4221: Time: 0.34122371673583984, Total Reward: 286.8335460692269, Q Loss: 47579.9560546875, Actor Loss: -12879.280975341797
Episode 4222: Time: 0.6928083896636963, Total Reward: 595.0322618513601, Q Loss: 101919.55603027344, Actor Loss: -27004.768524169922
Episode 4223: Time: 0.36317944526672363, Total Reward: 304.84573285696376, Q Loss: 52394.2294921875, Actor Loss: -14222.324615478516
Episode 4224: Time: 0.23545336723327637, Total Reward: 191.7672363826058, Q Loss: 38076.961364746094, Actor Loss: -8964.471221923828
Episode 4225: Time: 0.1921238899230957, Total Reward: 156.51928033009176, Q Loss: 28024.250366210938, Actor Loss: -7487.5433349609375
Episode 4226: Time: 0.40477561950683594, Total Reward: 342.6339075825682, Q Loss: 68362.16680908203, Actor Loss: -15583.283020019531
Episode 4227: Time: 0.17074060440063477, Total Reward: 135.5197296937432, Q Loss: 27641.190979003906, Actor Loss: -6817.834259033203
Episode 4228: Time: 0.17088937759399414, Total Reward: 138.01975547589365, Q Loss: 29153.14923095703, Actor Loss: -6810.316345214844
Episode 4229: Time: 0.10669612884521484, Total Reward: 82.12968239407132, Q Loss: 17575.967224121094, Actor Loss: -4203.250030517578
Episode 4230: Time: 0.522392988204956, Total Reward: 445.3529687242985, Q Loss: 85729.95349121094, Actor Loss: -20941.961456298828
Episode 4231: Time: 0.37325263023376465, Total Reward: 314.02234855967345, Q Loss: 58140.18182373047, Actor Loss: -14415.4873046875
Episode 4232: Time: 0.24530887603759766, Total Reward: 202.52844170390586, Q Loss: 43082.03839111328, Actor Loss: -9323.494903564453
Episode 4233: Time: 0.4905822277069092, Total Reward: 416.33355564030046, Q Loss: 77801.98272705078, Actor Loss: -19036.35043334961
Episode 4234: Time: 0.19264578819274902, Total Reward: 156.7990334990476, Q Loss: 31162.092163085938, Actor Loss: -7438.446807861328
Episode 4235: Time: 0.20364165306091309, Total Reward: 165.27280712280387, Q Loss: 32567.5908203125, Actor Loss: -7848.173583984375
Episode 4236: Time: 0.21462059020996094, Total Reward: 175.67826661295382, Q Loss: 38052.31384277344, Actor Loss: -8621.758911132812
Episode 4237: Time: 0.28901243209838867, Total Reward: 239.29661016207078, Q Loss: 44301.176818847656, Actor Loss: -11373.015502929688
Episode 4238: Time: 0.14968204498291016, Total Reward: 118.81260255179757, Q Loss: 21406.869201660156, Actor Loss: -5795.889831542969
Episode 4239: Time: 0.4378840923309326, Total Reward: 370.515665754918, Q Loss: 72381.00378417969, Actor Loss: -16899.77670288086
Episode 4240: Time: 0.5346176624298096, Total Reward: 454.32668044618896, Q Loss: 82923.39877319336, Actor Loss: -20768.297607421875
Episode 4241: Time: 0.39575719833374023, Total Reward: 334.1116946037349, Q Loss: 63132.77038574219, Actor Loss: -15743.77133178711

Episode 4242: Time: 0.502220630645752, Total Reward: 425.66507712930115, Q Loss: 85717.74108886719, Actor Loss: -20066.016967773438
Episode 4243: Time: 0.20354247093200684, Total Reward: 165.43798490013936, Q Loss: 35095.32958984375, Actor Loss: -7886.496978759766
Episode 4244: Time: 0.3108837604522705, Total Reward: 258.80137889717304, Q Loss: 46586.88165283203, Actor Loss: -12124.405334472656
Episode 4245: Time: 0.28867602348327637, Total Reward: 240.67630825273994, Q Loss: 45254.73254394531, Actor Loss: -11416.22964477539
Episode 4246: Time: 0.49088621139526367, Total Reward: 414.6700947522536, Q Loss: 71588.03500366211, Actor Loss: -19272.940368652344
Episode 4247: Time: 0.32141995429992676, Total Reward: 268.6179318569298, Q Loss: 48908.33853149414, Actor Loss: -12648.4892578125
Episode 4248: Time: 0.40634989738464355, Total Reward: 343.89848733134636, Q Loss: 65861.11264038086, Actor Loss: -16001.101318359375
Episode 4249: Time: 0.5354623794555664, Total Reward: 455.02397244447945, Q Loss: 79020.2017211914, Actor Loss: -21273.93569946289
Episode 4250: Time: 0.22509217262268066, Total Reward: 184.92997149873074, Q Loss: 42619.214416503906, Actor Loss: -9202.38949584961
Episode 4251: Time: 0.41812801361083984, Total Reward: 349.93459378111373, Q Loss: 69284.09185791016, Actor Loss: -17066.74252319336
Episode 4252: Time: 0.6203737258911133, Total Reward: 526.9501186434466, Q Loss: 104052.6137084961, Actor Loss: -24659.134490966797
Episode 4253: Time: 0.22494173049926758, Total Reward: 184.28880396330925, Q Loss: 40162.0129699707, Actor Loss: -8820.502868652344
Episode 4254: Time: 0.23649001121520996, Total Reward: 192.25315163041182, Q Loss: 40921.396240234375, Actor Loss: -9352.057037353516
Episode 4255: Time: 0.10747480392456055, Total Reward: 81.87851377437845, Q Loss: 15591.138244628906, Actor Loss: -4277.721588134766
Episode 4256: Time: 0.4083724021911621, Total Reward: 343.1268301314944, Q Loss: 60179.76495361328, Actor Loss: -16482.071197509766
Episode 4257: Time: 0.28968167304992676, Total Reward: 239.64706855791658, Q Loss: 47095.62365722656, Actor Loss: -11802.176025390625
Episode 4258: Time: 0.19311761856079102, Total Reward: 157.0712903032122, Q Loss: 30393.923461914062, Actor Loss: -7801.458709716797
Episode 4259: Time: 0.22599029541015625, Total Reward: 183.3942604210646, Q Loss: 41347.92907714844, Actor Loss: -8983.364471435547
Episode 4260: Time: 0.9205982685089111, Total Reward: 789.3785500333389, Q Loss: 155085.05255126953, Actor Loss: -37403.82061767578
Episode 4261: Time: 0.26766443252563477, Total Reward: 222.09959972734458, Q Loss: 46286.572998046875, Actor Loss: -10982.347930908203
Episode 4262: Time: 0.4071826934814453, Total Reward: 339.9979878037071, Q Loss: 73306.38842773438, Actor Loss: -16302.814086914062
Episode 4263: Time: 0.26833605766296387, Total Reward: 220.20762541599305, Q Loss: 41532.271240234375, Actor Loss: -11200.507629394531
Episode 4264: Time: 0.40668678283691406, Total Reward: 343.22155917411374, Q Loss: 65481.51525878906, Actor Loss: -16005.885162353516
Episode 4265: Time: 0.1608123779296875, Total Reward: 128.04011134423908, Q Loss: 24279.797241210938, Actor Loss: -6151.17578125
Episode 4266: Time: 0.43804240226745605, Total Reward: 370.77999661175477, Q Loss: 66102.46279907227, Actor Loss: -17376.817626953125
Episode 4267: Time: 0.9298126697540283, Total Reward: 799.7255012879525, Q Loss: 168238.14239501953, Actor Loss: -37640.42724609375
Episode 4268: Time: 0.2675302028656006, Total Reward: 222.03838237909073, Q Loss: 51517.7490234375, Actor Loss: -10903.907928466797
Episode 4269: Time: 0.19271111488342285, Total Reward: 156.6752453404621, Q Loss: 31647.331298828125, Actor Loss: -7678.076446533203

Episode 4270: Time: 0.41715168952941895, Total Reward: 352.2467284457865, Q
Loss: 64674.52526855469, Actor Loss: -16763.636810302734
Episode 4271: Time: 0.2035655975341797, Total Reward: 166.082855616522, Q Lo
ss: 29654.355895996094, Actor Loss: -8302.513122558594
Episode 4272: Time: 0.32053446769714355, Total Reward: 268.90946119307256, Q
Loss: 48977.43634033203, Actor Loss: -12981.325164794922
Episode 4273: Time: 0.20324230194091797, Total Reward: 165.93782988229896, Q
Loss: 36072.87976074219, Actor Loss: -8221.702880859375
Episode 4274: Time: 1.0144565105438232, Total Reward: 873.9827081413383, Q L
oss: 164309.69995117188, Actor Loss: -42368.98947143555
Episode 4275: Time: 0.29945802688598633, Total Reward: 248.58722838577262, Q
Loss: 50617.883361816406, Actor Loss: -12288.554168701172
Episode 4276: Time: 0.29973721504211426, Total Reward: 249.87770007505873, Q
Loss: 54578.057373046875, Actor Loss: -12107.331909179688
Episode 4277: Time: 0.41713404655456543, Total Reward: 351.2918499371594, Q
Loss: 69262.75213623047, Actor Loss: -17177.77471923828
Episode 4278: Time: 0.28876590728759766, Total Reward: 238.9742731941658, Q
Loss: 45079.242919921875, Actor Loss: -12271.58627319336
Episode 4279: Time: 0.40632033348083496, Total Reward: 343.3931286885036, Q
Loss: 72219.25732421875, Actor Loss: -16731.140350341797
Episode 4280: Time: 0.16061091423034668, Total Reward: 127.93474837173308, Q
Loss: 25546.92950439453, Actor Loss: -6550.341796875
Episode 4281: Time: 0.1400279998779297, Total Reward: 110.11853839235785, Q
Loss: 22129.4443359375, Actor Loss: -5744.774078369141
Episode 4282: Time: 0.2895047664642334, Total Reward: 237.77833689728143, Q
Loss: 46060.74542236328, Actor Loss: -12030.231994628906
Episode 4283: Time: 0.2890033721923828, Total Reward: 240.02919106518212, Q
Loss: 46172.15744018555, Actor Loss: -11833.691925048828
Episode 4284: Time: 0.4811141490936793, Total Reward: 407.27936735546473, Q
Loss: 86197.69799804688, Actor Loss: -19758.397735595703
Episode 4285: Time: 0.18226885795593262, Total Reward: 146.62372141709318, Q
Loss: 30890.305603027344, Actor Loss: -7189.466400146484
Episode 4286: Time: 0.3852851390838623, Total Reward: 323.71076333973474, Q
Loss: 63936.338623046875, Actor Loss: -15687.372161865234
Episode 4287: Time: 0.3213083744049072, Total Reward: 266.1560158310685, Q L
oss: 65564.99871826172, Actor Loss: -13566.76528930664
Episode 4288: Time: 0.5664293766021729, Total Reward: 481.8233704291622, Q L
oss: 89047.48272705078, Actor Loss: -23363.920288085938
Episode 4289: Time: 0.2464277744293213, Total Reward: 203.33283748163822, Q
Loss: 42039.52276611328, Actor Loss: -10405.639831542969
Episode 4290: Time: 0.2358565330505371, Total Reward: 192.0025915610511, Q L
oss: 37486.54461669922, Actor Loss: -10034.489776611328
Episode 4291: Time: 0.48115992546081543, Total Reward: 406.49661798112874, Q
Loss: 75083.98370361328, Actor Loss: -20004.175659179688
Episode 4292: Time: 0.22515153884887695, Total Reward: 184.66836979425548, Q
Loss: 34208.94592285156, Actor Loss: -9068.954223632812
Episode 4293: Time: 0.18192267417907715, Total Reward: 147.65695034708662, Q
Loss: 38433.12585449219, Actor Loss: -7706.556457519531
Episode 4294: Time: 0.2679121494293213, Total Reward: 220.8198153326324, Q L
oss: 44143.708435058594, Actor Loss: -10972.082916259766
Episode 4295: Time: 0.49187803268432617, Total Reward: 417.0194913293208, Q
Loss: 84614.91571044922, Actor Loss: -20376.60235595703
Episode 4296: Time: 0.2785799503326416, Total Reward: 229.71751299541108, Q
Loss: 55683.51403808594, Actor Loss: -11583.474212646484
Episode 4297: Time: 0.38539981842041016, Total Reward: 323.89068842712015, Q
Loss: 71149.09295654297, Actor Loss: -16232.999938964844

Episode 4298: Time: 0.20394539833068848, Total Reward: 165.41936000350773, Q Loss: 42075.576110839844, Actor Loss: -8279.870391845703
Episode 4299: Time: 0.1713275909423828, Total Reward: 136.8166190948708, Q Loss: 30556.58319091797, Actor Loss: -7337.953887939453
Validation Mean: 9354.770123355902, Validation Std: 0.2826771652608475
saving model
Episode 4300: Time: 0.21695804595947266, Total Reward: 174.46727267693444, Q Loss: 33239.356384277344, Actor Loss: -8626.932739257812
Episode 4301: Time: 0.13990139961242676, Total Reward: 109.82137498618549, Q Loss: 25965.176025390625, Actor Loss: -5658.814239501953
Episode 4302: Time: 0.3218193054199219, Total Reward: 268.4612072211617, Q Loss: 59526.45947265625, Actor Loss: -13441.286865234375
Episode 4303: Time: 0.41776156425476074, Total Reward: 351.66283777252835, Q Loss: 74682.87780761719, Actor Loss: -17778.76483154297
Episode 4304: Time: 0.2998523712158203, Total Reward: 249.83062116569073, Q Loss: 59762.34912109375, Actor Loss: -12652.96206665039
Episode 4305: Time: 0.31119704246520996, Total Reward: 258.2034600619207, Q Loss: 41670.27819824219, Actor Loss: -13102.939208984375
Episode 4306: Time: 0.28023314476013184, Total Reward: 231.4388918909362, Q Loss: 51807.45690917969, Actor Loss: -11755.40380859375
Episode 4307: Time: 0.13990354537963867, Total Reward: 110.04667869635333, Q Loss: 23588.394165039062, Actor Loss: -5999.347808837891
Episode 4308: Time: 0.471935510635376, Total Reward: 398.13215808710765, Q Loss: 84616.04992675781, Actor Loss: -19686.134033203125
Episode 4309: Time: 0.11846280097961426, Total Reward: 91.33518428629435, Q Loss: 30676.327514648438, Actor Loss: -5043.756134033203
Episode 4310: Time: 0.3970954418182373, Total Reward: 332.8973939743159, Q Loss: 68473.67199707031, Actor Loss: -16334.18408203125
Episode 4311: Time: 0.38576197624206543, Total Reward: 323.60736697664623, Q Loss: 73792.19763183594, Actor Loss: -16123.679595947266
Episode 4312: Time: 0.17145586013793945, Total Reward: 136.72031324406834, Q Loss: 36117.84014892578, Actor Loss: -7412.089111328125
Episode 4313: Time: 0.3106083869934082, Total Reward: 259.2211570294847, Q Loss: 56338.084228515625, Actor Loss: -13059.973052978516
Episode 4314: Time: 0.6745631694793701, Total Reward: 576.3298392885476, Q Loss: 142499.37854003906, Actor Loss: -28488.38363647461
Episode 4315: Time: 0.5775425434112549, Total Reward: 491.7168300985917, Q Loss: 103897.01477050781, Actor Loss: -24588.327209472656
Episode 4316: Time: 0.32120823860168457, Total Reward: 268.22996810458346, Q Loss: 62978.43475341797, Actor Loss: -13984.336456298828
Episode 4317: Time: 0.054062604904174805, Total Reward: 35.21520291931029, Q Loss: 14106.293212890625, Actor Loss: -2337.230682373047
Episode 4318: Time: 0.20371460914611816, Total Reward: 165.20771313479085, Q Loss: 40980.7958984375, Actor Loss: -8409.793487548828
Episode 4319: Time: 0.26830577850341797, Total Reward: 219.90932952832983, Q Loss: 40997.272705078125, Actor Loss: -11183.99282836914
Episode 4320: Time: 0.1826171875, Total Reward: 147.49959338628898, Q Loss: 35206.68469238281, Actor Loss: -7607.044158935547
Episode 4321: Time: 0.5029189586639404, Total Reward: 426.65002365233113, Q Loss: 84627.30853271484, Actor Loss: -21632.366638183594
Episode 4322: Time: 0.18180346488952637, Total Reward: 147.50345164466336, Q Loss: 33200.99768066406, Actor Loss: -7604.810119628906
Episode 4323: Time: 0.7907190322875977, Total Reward: 677.9048729204652, Q Loss: 137105.42065429688, Actor Loss: -33661.70391845703
Episode 4324: Time: 0.5019543170928955, Total Reward: 426.859708661242, Q Loss: 87508.25408935547, Actor Loss: -21176.506378173828

Episode 4325: Time: 0.994373083114624, Total Reward: 855.3788403145643, Q Loss: 178223.86529541016, Actor Loss: -42506.841400146484
Episode 4326: Time: 0.2257375717163086, Total Reward: 184.63677265286043, Q Loss: 37562.105224609375, Actor Loss: -9726.239715576172
Episode 4327: Time: 0.19288873672485352, Total Reward: 155.65913324178385, Q Loss: 42616.412353515625, Actor Loss: -8337.993865966797
Episode 4328: Time: 0.2685713768005371, Total Reward: 220.27205138567655, Q Loss: 52020.83038330078, Actor Loss: -11554.090240478516
Episode 4329: Time: 0.44927120208740234, Total Reward: 379.94525899986513, Q Loss: 73679.33508300781, Actor Loss: -19083.672790527344
Episode 4330: Time: 0.1607379913330078, Total Reward: 127.8600457880154, Q Loss: 28948.892364501953, Actor Loss: -6859.370025634766
Episode 4331: Time: 0.47118496894836426, Total Reward: 398.8284644714641, Q Loss: 83636.3998413086, Actor Loss: -20681.548217773438
Episode 4332: Time: 0.12910246849060059, Total Reward: 99.19187713733707, Q Loss: 21707.167419433594, Actor Loss: -5525.269073486328
Episode 4333: Time: 0.1827847957611084, Total Reward: 145.7136937079772, Q Loss: 34935.07458496094, Actor Loss: -8110.148345947266
Episode 4334: Time: 0.503817081451416, Total Reward: 426.0081185077783, Q Loss: 106208.15539550781, Actor Loss: -21459.571899414062
Episode 4335: Time: 0.3646707534790039, Total Reward: 304.5275216930221, Q Loss: 78174.72717285156, Actor Loss: -15823.030578613281
Episode 4336: Time: 0.6643426418304443, Total Reward: 567.04037576568, Q Loss: 122309.81329345703, Actor Loss: -29093.467041015625
Episode 4337: Time: 0.267833948135376, Total Reward: 221.85156792698953, Q Loss: 43551.65734863281, Actor Loss: -11742.750885009766
Episode 4338: Time: 0.13959479331970215, Total Reward: 110.52536500755818, Q Loss: 25551.665283203125, Actor Loss: -6028.894439697266
Episode 4339: Time: 0.37526893615722656, Total Reward: 313.56681862512914, Q Loss: 76420.14367675781, Actor Loss: -15886.452911376953
Episode 4340: Time: 0.36481666564941406, Total Reward: 305.2969401771234, Q Loss: 70600.5991821289, Actor Loss: -15804.972930908203
Episode 4341: Time: 0.20430779457092285, Total Reward: 165.8926473712994, Q Loss: 40890.080810546875, Actor Loss: -8678.848449707031
Episode 4342: Time: 0.4078941345214844, Total Reward: 342.5188337646502, Q Loss: 77859.65759277344, Actor Loss: -17843.370635986328
Episode 4343: Time: 0.3219943046569824, Total Reward: 269.0026437371728, Q Loss: 64582.97100830078, Actor Loss: -13465.563537597656
Episode 4344: Time: 0.25803256034851074, Total Reward: 211.02679896208724, Q Loss: 56015.099365234375, Actor Loss: -11419.137390136719
Episode 4345: Time: 0.27908849716186523, Total Reward: 229.49549661089682, Q Loss: 53894.079528808594, Actor Loss: -11972.624328613281
Episode 4346: Time: 0.6657676696777344, Total Reward: 564.9344764336162, Q Loss: 110784.92373657227, Actor Loss: -28663.160186767578
Episode 4347: Time: 0.1826179027557373, Total Reward: 146.69832245573483, Q Loss: 39570.37811279297, Actor Loss: -7720.186981201172
Episode 4348: Time: 0.08658528327941895, Total Reward: 63.39276020084649, Q Loss: 14035.096496582031, Actor Loss: -3723.6806640625
Episode 4349: Time: 0.4618351459503174, Total Reward: 387.4703375467217, Q Loss: 87840.26538085938, Actor Loss: -20245.973602294922
Episode 4350: Time: 0.2795836925506592, Total Reward: 230.88355803429812, Q Loss: 56276.17596435547, Actor Loss: -12414.635467529297
Episode 4351: Time: 0.3005707263946533, Total Reward: 249.38962833157274, Q Loss: 51915.214111328125, Actor Loss: -13244.415435791016
Episode 4352: Time: 0.23647332191467285, Total Reward: 192.76825709124668, Q Loss: 53821.365478515625, Actor Loss: -10361.349792480469

Episode 4353: Time: 1.0396432876586914, Total Reward: 892.8454104423247, Q Loss: 191871.34375, Actor Loss: -45009.44790649414
Episode 4354: Time: 0.23622989654541016, Total Reward: 194.28013027722824, Q Loss: 44376.66094970703, Actor Loss: -10050.053833007812
Episode 4355: Time: 0.09714579582214355, Total Reward: 72.76104883113723, Q Loss: 15967.164428710938, Actor Loss: -4310.197814941406
Episode 4356: Time: 0.34444427490234375, Total Reward: 286.9091608322305, Q Loss: 60488.02880859375, Actor Loss: -15306.721496582031
Episode 4357: Time: 0.7630269527435303, Total Reward: 649.9041869324041, Q Loss: 156908.82287597656, Actor Loss: -33870.250732421875
Episode 4358: Time: 0.13961338996887207, Total Reward: 109.87195989023456, Q Loss: 29732.855102539062, Actor Loss: -5865.235778808594
Episode 4359: Time: 0.10804033279418945, Total Reward: 81.47533068740422, Q Loss: 25116.999755859375, Actor Loss: -4695.232360839844
Episode 4360: Time: 0.5265028476715088, Total Reward: 440.4866772819855, Q Loss: 96129.35382080078, Actor Loss: -23044.036651611328
Episode 4361: Time: 0.13973402976989746, Total Reward: 110.22821702587156, Q Loss: 25934.339904785156, Actor Loss: -6284.253631591797
Episode 4362: Time: 0.5797891616821289, Total Reward: 489.5415767032133, Q Loss: 116604.5775756836, Actor Loss: -26064.252716064453
Episode 4363: Time: 0.3543543815612793, Total Reward: 294.3439237331609, Q Loss: 67551.29229736328, Actor Loss: -16319.079681396484
Episode 4364: Time: 0.353496789932251, Total Reward: 295.62503788155425, Q Loss: 60659.53985595703, Actor Loss: -15815.104400634766
Episode 4365: Time: 0.3329038619995117, Total Reward: 275.2235056742667, Q Loss: 60192.62774658203, Actor Loss: -15205.578796386719
Episode 4366: Time: 0.5778920650482178, Total Reward: 488.61863240267894, Q Loss: 115550.23272705078, Actor Loss: -25725.284057617188
Episode 4367: Time: 0.32207465171813965, Total Reward: 268.25760481718646, Q Loss: 68753.66455078125, Actor Loss: -14398.975402832031
Episode 4368: Time: 0.20387721061706543, Total Reward: 165.90496350372942, Q Loss: 31651.562255859375, Actor Loss: -9212.118194580078
Episode 4369: Time: 0.45064353942871094, Total Reward: 380.3574687459117, Q Loss: 86466.6890258789, Actor Loss: -19608.561889648438
Episode 4370: Time: 0.4294884204864502, Total Reward: 359.48826336454783, Q Loss: 71829.11291503906, Actor Loss: -19635.83184814453
Episode 4371: Time: 0.17190265655517578, Total Reward: 136.8744802875794, Q Loss: 36578.4306640625, Actor Loss: -7616.588439941406
Episode 4372: Time: 0.3116011619567871, Total Reward: 259.10413687252213, Q Loss: 71102.31463623047, Actor Loss: -13853.186553955078
Episode 4373: Time: 0.525484561920166, Total Reward: 444.69718876514435, Q Loss: 99049.50622558594, Actor Loss: -23580.673889160156
Episode 4374: Time: 0.2901754379272461, Total Reward: 238.96849066008735, Q Loss: 48466.560607910156, Actor Loss: -12941.021850585938
Episode 4375: Time: 0.39738917350769043, Total Reward: 333.27756543839604, Q Loss: 86687.16333007812, Actor Loss: -18370.836791992188
Episode 4376: Time: 0.12913799285888672, Total Reward: 100.8863640175107, Q Loss: 23594.872314453125, Actor Loss: -5665.468170166016
Episode 4377: Time: 0.3336794376373291, Total Reward: 277.226641142265, Q Loss: 73745.39916992188, Actor Loss: -14720.366638183594
Episode 4378: Time: 0.3334665298461914, Total Reward: 276.9165747461317, Q Loss: 62608.80645751953, Actor Loss: -15231.549438476562
Episode 4379: Time: 0.1292111873626709, Total Reward: 100.82018507839263, Q Loss: 29506.64013671875, Actor Loss: -5987.322662353516
Episode 4380: Time: 0.07568049430847168, Total Reward: 54.070906106195054, Q Loss: 11781.827453613281, Actor Loss: -3205.3955688476562

Episode 4381: Time: 0.376309871673584, Total Reward: 311.4285912614372, Q Loss: 72133.70678710938, Actor Loss: -16338.827270507812
Episode 4382: Time: 0.33257484436035156, Total Reward: 274.7822073665961, Q Loss: 62966.86279296875, Actor Loss: -15204.736755371094
Episode 4383: Time: 0.1720280647277832, Total Reward: 136.84659859193022, Q Loss: 36518.43927001953, Actor Loss: -7654.5894775390625
Episode 4384: Time: 0.30132555961608887, Total Reward: 249.47562705887492, Q Loss: 82331.32592773438, Actor Loss: -13382.959838867188
Episode 4385: Time: 0.2584352493286133, Total Reward: 212.11783236330422, Q Loss: 42796.213439941406, Actor Loss: -11339.988189697266
Episode 4386: Time: 0.5801396369934082, Total Reward: 491.15695670618487, Q Loss: 108793.96075439453, Actor Loss: -25684.421173095703
Episode 4387: Time: 0.5055868625640869, Total Reward: 427.81904767324204, Q Loss: 118332.31530761719, Actor Loss: -23248.826202392578
Episode 4388: Time: 0.28043031692504883, Total Reward: 230.01226599919042, Q Loss: 52459.825134277344, Actor Loss: -12353.460540771484
Episode 4389: Time: 0.33367013931274414, Total Reward: 276.7235297681743, Q Loss: 62233.338928222656, Actor Loss: -14952.386260986328
Episode 4390: Time: 0.7095112800598145, Total Reward: 599.980302638524, Q Loss: 125590.61071777344, Actor Loss: -32234.31039428711
Episode 4391: Time: 0.2049107551574707, Total Reward: 166.09189108842867, Q Loss: 36842.51708984375, Actor Loss: -9288.140228271484
Episode 4392: Time: 0.3230903148651123, Total Reward: 268.7758634317414, Q Loss: 59507.978515625, Actor Loss: -14462.101867675781
Episode 4393: Time: 0.19458985328674316, Total Reward: 155.75625085918125, Q Loss: 45869.75732421875, Actor Loss: -8878.260925292969
Episode 4394: Time: 0.5479083061218262, Total Reward: 460.68656118296906, Q Loss: 116892.89184570312, Actor Loss: -24892.129943847656
Episode 4395: Time: 0.3227956295013428, Total Reward: 267.01048007124075, Q Loss: 66410.80285644531, Actor Loss: -14466.276458740234
Episode 4396: Time: 0.13997435569763184, Total Reward: 110.20191355877192, Q Loss: 32760.076232910156, Actor Loss: -6666.673767089844
Episode 4397: Time: 0.38695216178894043, Total Reward: 319.5614707885586, Q Loss: 86462.94519042969, Actor Loss: -17715.220764160156
Episode 4398: Time: 0.2046511173248291, Total Reward: 165.65479239510609, Q Loss: 41817.987548828125, Actor Loss: -9081.15249633789
Episode 4399: Time: 0.13986992835998535, Total Reward: 108.39210302715684, Q Loss: 34086.7109375, Actor Loss: -6340.720886230469
Validation Mean: 9356.096358991732, Validation Std: 0.23140550099915033
saving model
Episode 4400: Time: 0.6259663105010986, Total Reward: 529.4716729389684, Q Loss: 116360.90356445312, Actor Loss: -28480.988800048828
Episode 4401: Time: 0.6016416549682617, Total Reward: 508.24766486282806, Q Loss: 121316.90454101562, Actor Loss: -27332.48748779297
Episode 4402: Time: 0.3121812343597412, Total Reward: 258.45019454148434, Q Loss: 61468.08770751953, Actor Loss: -14209.510284423828
Episode 4403: Time: 0.3665041923522949, Total Reward: 303.2199160612682, Q Loss: 89060.00817871094, Actor Loss: -17074.63427734375
Episode 4404: Time: 0.3025369644165039, Total Reward: 248.57373679042774, Q Loss: 65875.23937988281, Actor Loss: -14048.435485839844
Episode 4405: Time: 0.7524440288543701, Total Reward: 638.8672737857192, Q Loss: 149804.59869384766, Actor Loss: -34593.36071777344
Episode 4406: Time: 0.7199862003326416, Total Reward: 611.7548071919667, Q Loss: 155311.2764892578, Actor Loss: -33410.1188659668
Episode 4407: Time: 0.21535205841064453, Total Reward: 174.40237066942058, Q Loss: 48998.127685546875, Actor Loss: -9915.306213378906

Episode 4408: Time: 0.29040956497192383, Total Reward: 240.73945350705958, Q Loss: 67142.84979248047, Actor Loss: -13073.779357910156
Episode 4409: Time: 0.29051947593688965, Total Reward: 240.89685143946312, Q Loss: 65369.109130859375, Actor Loss: -13141.237274169922
Episode 4410: Time: 0.5912747383117676, Total Reward: 500.2428833903567, Q Loss: 125391.66772460938, Actor Loss: -28035.91778564453
Episode 4411: Time: 0.24790430068969727, Total Reward: 202.2154837391963, Q Loss: 50462.584716796875, Actor Loss: -11338.025512695312
Episode 4412: Time: 0.3336048126220703, Total Reward: 277.04601112985256, Q Loss: 58818.613708496094, Actor Loss: -15630.065490722656
Episode 4413: Time: 0.19332551956176758, Total Reward: 157.27805233220187, Q Loss: 38641.32275390625, Actor Loss: -8854.02505493164
Episode 4414: Time: 0.3657991886138916, Total Reward: 304.98007901576005, Q Loss: 73603.25512695312, Actor Loss: -17250.965942382812
Episode 4415: Time: 0.15079712867736816, Total Reward: 119.44431584242122, Q Loss: 32612.40673828125, Actor Loss: -7010.9224853515625
Episode 4416: Time: 0.5594451427459717, Total Reward: 474.44354307649473, Q Loss: 126574.40478515625, Actor Loss: -26084.73895263672
Episode 4417: Time: 0.08640432357788086, Total Reward: 63.47812400464823, Q Loss: 24202.610717773438, Actor Loss: -3972.318084716797
Episode 4418: Time: 0.4950411319732666, Total Reward: 417.934286629266, Q Loss: 108830.5546875, Actor Loss: -22900.498138427734
Episode 4419: Time: 0.41984057426452637, Total Reward: 351.7423787991393, Q Loss: 87522.13635253906, Actor Loss: -19190.816131591797
Episode 4420: Time: 0.4415247440338135, Total Reward: 371.7007483761585, Q Loss: 91100.3179321289, Actor Loss: -20640.062103271484
Episode 4421: Time: 0.15131616592407227, Total Reward: 119.57093952768886, Q Loss: 31084.247314453125, Actor Loss: -6629.8477783203125
Episode 4422: Time: 0.4738154411315918, Total Reward: 398.727893213448, Q Loss: 112498.01513671875, Actor Loss: -22167.68182373047
Episode 4423: Time: 0.41904187202453613, Total Reward: 351.76491955266397, Q Loss: 103056.9907836914, Actor Loss: -19832.662841796875
Episode 4424: Time: 0.37638378143310547, Total Reward: 315.3690441787577, Q Loss: 73449.88604736328, Actor Loss: -17617.666015625
Episode 4425: Time: 0.2692873477935791, Total Reward: 221.41264628696905, Q Loss: 67237.22680664062, Actor Loss: -12945.065063476562
Episode 4426: Time: 0.6123733520507812, Total Reward: 520.744972561254, Q Loss: 134379.47723388672, Actor Loss: -28848.61407470703
Episode 4427: Time: 0.26905012130737305, Total Reward: 220.48529365462727, Q Loss: 59191.14678955078, Actor Loss: -12560.263641357422
Episode 4428: Time: 0.3013432025909424, Total Reward: 248.73330768989507, Q Loss: 62518.40417480469, Actor Loss: -14087.234252929688
Episode 4429: Time: 0.19387221336364746, Total Reward: 156.41717732419096, Q Loss: 43164.614013671875, Actor Loss: -8884.515075683594
Episode 4430: Time: 0.8374772071838379, Total Reward: 714.8243431235267, Q Loss: 185557.43280029297, Actor Loss: -39812.562072753906
Episode 4431: Time: 0.3876180648803711, Total Reward: 323.1661302220417, Q Loss: 93794.58703613281, Actor Loss: -18304.333435058594
Episode 4432: Time: 0.36647963523864746, Total Reward: 306.33959129373596, Q Loss: 93942.43310546875, Actor Loss: -17474.574432373047
Episode 4433: Time: 0.20566749572753906, Total Reward: 165.68457348459233, Q Loss: 51529.844482421875, Actor Loss: -9801.43130493164
Episode 4434: Time: 0.17283105850219727, Total Reward: 138.22192746651356, Q Loss: 38469.744873046875, Actor Loss: -8617.901245117188
Episode 4435: Time: 0.9445695877075195, Total Reward: 807.0445530796196, Q Loss: 200865.00360107422, Actor Loss: -45322.472686676758

Episode 4436: Time: 0.4291865825653076, Total Reward: 359.9792704200233, Q Loss: 98788.89190673828, Actor Loss: -20300.545318603516
Episode 4437: Time: 0.7834033966064453, Total Reward: 668.2425285663721, Q Loss: 192471.53674316406, Actor Loss: -38086.93716430664
Episode 4438: Time: 0.538499116897583, Total Reward: 453.58248852677116, Q Loss: 128291.98040771484, Actor Loss: -25614.116821289062
Episode 4439: Time: 0.48433518409729004, Total Reward: 408.44997576854433, Q Loss: 106819.85290527344, Actor Loss: -23617.164276123047
Episode 4440: Time: 0.15064740180969238, Total Reward: 119.20970027967265, Q Loss: 40364.35437011719, Actor Loss: -7406.4012451171875
Episode 4441: Time: 0.5377867221832275, Total Reward: 453.79801054756217, Q Loss: 124579.6162109375, Actor Loss: -25884.869354248047
Episode 4442: Time: 0.5479834079742432, Total Reward: 462.1288710831784, Q Loss: 126700.40856933594, Actor Loss: -26184.03924560547
Episode 4443: Time: 0.2585148811340332, Total Reward: 212.25526502292186, Q Loss: 58414.703186035156, Actor Loss: -12459.700073242188
Episode 4444: Time: 0.3887307643890381, Total Reward: 323.56708848541933, Q Loss: 92927.9189453125, Actor Loss: -18403.42611694336
Episode 4445: Time: 0.47335100173950195, Total Reward: 395.87333596524513, Q Loss: 103831.25537109375, Actor Loss: -22901.72869873047
Episode 4446: Time: 0.5804443359375, Total Reward: 491.0181728374755, Q Loss: 132885.3670654297, Actor Loss: -28186.86981201172
Episode 4447: Time: 0.15122318267822266, Total Reward: 118.94750109969168, Q Loss: 30087.5126953125, Actor Loss: -7195.551513671875
Episode 4448: Time: 0.1297740936279297, Total Reward: 100.92056171649791, Q Loss: 26236.41082763672, Actor Loss: -6189.1868896484375
Episode 4449: Time: 0.31130194664001465, Total Reward: 259.2399825898695, Q Loss: 89551.83825683594, Actor Loss: -14844.672088623047
Episode 4450: Time: 0.3013944625854492, Total Reward: 249.69523850092025, Q Loss: 71477.9443359375, Actor Loss: -14512.357238769531
Episode 4451: Time: 0.2368459701538086, Total Reward: 194.30308477800082, Q Loss: 61688.19470214844, Actor Loss: -11495.57406616211
Episode 4452: Time: 0.09688520431518555, Total Reward: 73.04671238559136, Q Loss: 20471.081298828125, Actor Loss: -4533.214630126953
Episode 4453: Time: 0.2795283794403076, Total Reward: 231.17390468026286, Q Loss: 56221.97766113281, Actor Loss: -13520.163452148438
Episode 4454: Time: 0.1936173439025879, Total Reward: 156.3940862074938, Q Loss: 57618.80505371094, Actor Loss: -9479.206329345703
Episode 4455: Time: 0.22635746002197266, Total Reward: 184.1618182417111, Q Loss: 53698.529296875, Actor Loss: -10955.702545166016
Episode 4456: Time: 0.2480611801147461, Total Reward: 203.33135821208185, Q Loss: 61875.712463378906, Actor Loss: -12047.253509521484
Episode 4457: Time: 0.3874349594116211, Total Reward: 323.27110851186586, Q Loss: 104558.1904296875, Actor Loss: -18992.293670654297
Episode 4458: Time: 0.3231511116027832, Total Reward: 268.65021967950565, Q Loss: 75636.69067382812, Actor Loss: -15746.136047363281
Episode 4459: Time: 0.559420108795166, Total Reward: 472.32758163881044, Q Loss: 118742.56713867188, Actor Loss: -27494.02182006836
Episode 4460: Time: 0.39814114570617676, Total Reward: 332.83502428187967, Q Loss: 91601.00659179688, Actor Loss: -19379.68588256836
Episode 4461: Time: 0.28043699264526367, Total Reward: 230.66291523688636, Q Loss: 66487.4408569336, Actor Loss: -13258.74755859375
Episode 4462: Time: 0.2589707374572754, Total Reward: 212.74188299543448, Q Loss: 61321.480712890625, Actor Loss: -12661.791900634766
Episode 4463: Time: 0.43061256408691406, Total Reward: 360.46451222795497, Q Loss: 110949.1294555664, Actor Loss: -20813.286254882812

Episode 4464: Time: 0.16154265403747559, Total Reward: 128.839350750484, Q Loss: 36683.7568359375, Actor Loss: -7948.635406494141
Episode 4465: Time: 0.3551151752471924, Total Reward: 296.25392597201983, Q Loss: 87754.8193359375, Actor Loss: -17293.600158691406
Episode 4466: Time: 0.12919235229492188, Total Reward: 101.10972926542854, Q Loss: 30918.316040039062, Actor Loss: -6299.297790527344
Episode 4467: Time: 0.09737825393676758, Total Reward: 72.67526439880459, Q Loss: 25002.453491210938, Actor Loss: -4730.973541259766
Episode 4468: Time: 0.4734513759613037, Total Reward: 399.1052027050974, Q Loss: 106338.22717285156, Actor Loss: -23144.787078857422
Episode 4469: Time: 0.22592401504516602, Total Reward: 184.5330877009867, Q Loss: 48679.031677246094, Actor Loss: -11083.140808105469
Episode 4470: Time: 0.21563005447387695, Total Reward: 173.53622961959093, Q Loss: 60240.126708984375, Actor Loss: -10573.685791015625
Episode 4471: Time: 0.2796299457550049, Total Reward: 230.79524036454242, Q Loss: 67659.04577636719, Actor Loss: -13376.96939086914
Episode 4472: Time: 0.44100403785705566, Total Reward: 370.60092661473385, Q Loss: 105214.82666015625, Actor Loss: -21227.189178466797
Episode 4473: Time: 0.3228316307067871, Total Reward: 268.42037418448126, Q Loss: 85936.06091308594, Actor Loss: -15813.282958984375
Episode 4474: Time: 0.23683786392211914, Total Reward: 192.85121044678732, Q Loss: 50662.145263671875, Actor Loss: -11255.40591430664
Episode 4475: Time: 0.48478150367736816, Total Reward: 405.78801485609387, Q Loss: 111629.9107055664, Actor Loss: -23452.953979492188
Episode 4476: Time: 0.3654613494873047, Total Reward: 306.12222544759436, Q Loss: 78007.74432373047, Actor Loss: -18243.530487060547
Episode 4477: Time: 0.40886640548706055, Total Reward: 342.38981751877856, Q Loss: 92603.07019042969, Actor Loss: -20073.758331298828
Episode 4478: Time: 0.24780774116516113, Total Reward: 203.23320640071478, Q Loss: 53155.77490234375, Actor Loss: -12500.290588378906
Episode 4479: Time: 1.0109903812408447, Total Reward: 861.1156502947833, Q Loss: 247855.96716308594, Actor Loss: -51112.37191772461
Episode 4480: Time: 0.2476208209991455, Total Reward: 203.27376990449918, Q Loss: 55407.454528808594, Actor Loss: -12301.712524414062
Episode 4481: Time: 0.34483909606933594, Total Reward: 285.9122967714077, Q Loss: 84677.03631591797, Actor Loss: -17290.536865234375
Episode 4482: Time: 0.4954047203063965, Total Reward: 417.34095762665413, Q Loss: 118795.48889160156, Actor Loss: -24501.090057373047
Episode 4483: Time: 0.2050800323486328, Total Reward: 165.31607703629066, Q Loss: 51050.17999267578, Actor Loss: -10418.697723388672
Episode 4484: Time: 0.34463071823120117, Total Reward: 287.38382479446454, Q Loss: 82757.56262207031, Actor Loss: -17451.413299560547
Episode 4485: Time: 0.29122495651245117, Total Reward: 240.50755863437743, Q Loss: 71871.7250366211, Actor Loss: -14793.801483154297
Episode 4486: Time: 0.40973997116088867, Total Reward: 342.7466511824758, Q Loss: 95555.34783935547, Actor Loss: -20545.747436523438
Episode 4487: Time: 0.22701621055603027, Total Reward: 184.71201700630917, Q Loss: 57626.8076171875, Actor Loss: -10989.985321044922
Episode 4488: Time: 0.24823832511901855, Total Reward: 202.6447353698158, Q Loss: 68015.71362304688, Actor Loss: -12410.187774658203
Episode 4489: Time: 0.23750710487365723, Total Reward: 192.50761195329326, Q Loss: 74186.15270996094, Actor Loss: -11670.29086303711
Episode 4490: Time: 0.33385372161865234, Total Reward: 278.3023860020819, Q Loss: 98837.92785644531, Actor Loss: -16516.211853027344
Episode 4491: Time: 0.10783982276916504, Total Reward: 81.46365028035821, Q Loss: 23711.831176757812, Actor Loss: -5196.009002685547

Episode 4492: Time: 0.15107464790344238, Total Reward: 119.35406515172424, Q Loss: 32470.321716308594, Actor Loss: -7217.170349121094
Episode 4493: Time: 0.22683453559875488, Total Reward: 183.5633087057778, Q Loss: 57973.56530761719, Actor Loss: -11651.814849853516
Episode 4494: Time: 0.3017251491546631, Total Reward: 249.78528278555623, Q Loss: 82886.81555175781, Actor Loss: -15239.72787475586
Episode 4495: Time: 0.1506059169769287, Total Reward: 119.91041881380487, Q Loss: 35792.58837890625, Actor Loss: -7698.073211669922
Episode 4496: Time: 0.4414234161376953, Total Reward: 371.0115417557757, Q Loss: 126333.49114990234, Actor Loss: -22746.336151123047
Episode 4497: Time: 0.3876922130584717, Total Reward: 321.5508675745375, Q Loss: 88220.96087646484, Actor Loss: -19735.557861328125
Episode 4498: Time: 0.2262561321258545, Total Reward: 184.48175465796223, Q Loss: 56511.158935546875, Actor Loss: -11498.114776611328
Episode 4499: Time: 0.2589395046234131, Total Reward: 209.73070342754767, Q Loss: 70460.55004882812, Actor Loss: -13195.354766845703
Validation Mean: 9352.592472693685, Validation Std: 0.7998048421757015
saving model
Episode 4500: Time: 0.4005584716796875, Total Reward: 333.40960181513407, Q Loss: 100197.58374023438, Actor Loss: -20116.59848022461
Episode 4501: Time: 0.3124532699584961, Total Reward: 258.598001700089, Q Loss: 77199.4794921875, Actor Loss: -15528.598602294922
Episode 4502: Time: 0.33416104316711426, Total Reward: 277.37144385672343, Q Loss: 79489.31610107422, Actor Loss: -16787.339233398438
Episode 4503: Time: 0.4310171604156494, Total Reward: 361.6851386671696, Q Loss: 95242.11431884766, Actor Loss: -21760.909545898438
Episode 4504: Time: 0.6023919582366943, Total Reward: 510.4060860826516, Q Loss: 135727.20654296875, Actor Loss: -30504.900909423828
Episode 4505: Time: 0.2492516040802002, Total Reward: 199.70694748396275, Q Loss: 71356.21630859375, Actor Loss: -12627.891723632812
Episode 4506: Time: 0.24839520454406738, Total Reward: 201.8939260060276, Q Loss: 67212.47180175781, Actor Loss: -12347.930450439453
Episode 4507: Time: 0.7105104923248291, Total Reward: 603.1650189658258, Q Loss: 182701.8155517578, Actor Loss: -35665.13330078125
Episode 4508: Time: 0.22647356986999512, Total Reward: 184.67568228378326, Q Loss: 55380.692932128906, Actor Loss: -11806.943145751953
Episode 4509: Time: 0.16150593757629395, Total Reward: 128.73410144499775, Q Loss: 46201.727783203125, Actor Loss: -8443.569946289062
Episode 4510: Time: 0.495013952255249, Total Reward: 417.3749048104372, Q Loss: 133712.673828125, Actor Loss: -24822.57958984375
Episode 4511: Time: 0.22684216499328613, Total Reward: 182.2015451342417, Q Loss: 54825.82287597656, Actor Loss: -11269.5419921875
Episode 4512: Time: 0.4534032344818115, Total Reward: 379.9958006777808, Q Loss: 110628.12420654297, Actor Loss: -22495.459442138672
Episode 4513: Time: 0.3987269401550293, Total Reward: 332.6212485943557, Q Loss: 92950.69360351562, Actor Loss: -19962.652099609375
Episode 4514: Time: 0.19382596015930176, Total Reward: 157.05991457847327, Q Loss: 45245.55694580078, Actor Loss: -9974.721069335938
Episode 4515: Time: 0.0973210334777832, Total Reward: 72.21915018742337, Q Loss: 29132.979736328125, Actor Loss: -4813.121551513672
Episode 4516: Time: 0.23722600936889648, Total Reward: 192.08057176143114, Q Loss: 62760.31335449219, Actor Loss: -12141.288757324219
Episode 4517: Time: 0.537938117980957, Total Reward: 454.5089773987061, Q Loss: 138253.12969970703, Actor Loss: -27845.537048339844
Episode 4518: Time: 0.12949824333190918, Total Reward: 100.79323653971915, Q Loss: 43327.88024902344, Actor Loss: -6991.075744628906

Episode 4519: Time: 0.4206264019012451, Total Reward: 351.24511124645096, Q Loss: 115220.01330566406, Actor Loss: -21432.785888671875
Episode 4520: Time: 0.3127107620239258, Total Reward: 258.8171985439321, Q Loss: 82945.1781616211, Actor Loss: -15764.715026855469
Episode 4521: Time: 0.5491673946380615, Total Reward: 464.1664102164491, Q Loss: 125936.45080566406, Actor Loss: -28051.555145263672
Episode 4522: Time: 0.14033246040344238, Total Reward: 109.99738754040715, Q Loss: 30819.247619628906, Actor Loss: -6968.656341552734
Episode 4523: Time: 0.19452929496765137, Total Reward: 156.0538881891971, Q Loss: 49808.32727050781, Actor Loss: -9869.289245605469
Episode 4524: Time: 0.20557117462158203, Total Reward: 165.86001444352164, Q Loss: 46436.21520996094, Actor Loss: -10269.235656738281
Episode 4525: Time: 0.19424033164978027, Total Reward: 156.12463924278444, Q Loss: 46245.91491699219, Actor Loss: -9849.585906982422
Episode 4526: Time: 0.3448982238769531, Total Reward: 286.43069835565296, Q Loss: 73606.81762695312, Actor Loss: -17756.317291259766
Episode 4527: Time: 0.17264723777770996, Total Reward: 137.11064317929743, Q Loss: 38333.76452636719, Actor Loss: -8708.630645751953
Episode 4528: Time: 0.8931534290313721, Total Reward: 760.1279858811356, Q Loss: 246923.54150390625, Actor Loss: -46619.83480834961
Episode 4529: Time: 0.5915954113006592, Total Reward: 502.35769956609414, Q Loss: 158663.50219726562, Actor Loss: -30757.553985595703
Episode 4530: Time: 0.2377336025238037, Total Reward: 192.64358761436426, Q Loss: 60619.55651855469, Actor Loss: -12316.867431640625
Episode 4531: Time: 0.1616833209991455, Total Reward: 127.00675063473764, Q Loss: 42426.32312011719, Actor Loss: -8428.233001708984
Episode 4532: Time: 0.12999176979064941, Total Reward: 100.63427803311626, Q Loss: 35021.63635253906, Actor Loss: -6463.8572998046875
Episode 4533: Time: 0.34474968910217285, Total Reward: 286.87746028968496, Q Loss: 84918.25769042969, Actor Loss: -17747.30404663086
Episode 4534: Time: 0.29137468338012695, Total Reward: 239.75346241530468, Q Loss: 65021.773193359375, Actor Loss: -14874.27279663086
Episode 4535: Time: 0.1293954849243164, Total Reward: 100.18650172172, Q Loss: 32240.958740234375, Actor Loss: -6676.779357910156
Episode 4536: Time: 0.366685152053833, Total Reward: 305.53410101151394, Q Loss: 92501.8388671875, Actor Loss: -19109.973663330078
Episode 4537: Time: 0.5919477939605713, Total Reward: 500.6221457465094, Q Loss: 147254.3106689453, Actor Loss: -30805.159606933594
Episode 4538: Time: 0.2264854907989502, Total Reward: 184.46750048996148, Q Loss: 47120.704345703125, Actor Loss: -11845.90771484375
Episode 4539: Time: 0.3344898223876953, Total Reward: 277.17092586742496, Q Loss: 82853.99615478516, Actor Loss: -17717.135314941406
Episode 4540: Time: 0.1830277442932129, Total Reward: 146.7364271977301, Q Loss: 48003.20568847656, Actor Loss: -9712.926818847656
Episode 4541: Time: 0.3441438674926758, Total Reward: 286.91920242014095, Q Loss: 76892.25402832031, Actor Loss: -17876.98861694336
Episode 4542: Time: 0.2912731170654297, Total Reward: 240.10408577122394, Q Loss: 80898.99133300781, Actor Loss: -15184.358306884766
Episode 4543: Time: 0.3450937271118164, Total Reward: 287.0196885245422, Q Loss: 88037.88720703125, Actor Loss: -17791.088500976562
Episode 4544: Time: 0.22660112380981445, Total Reward: 184.95792820597762, Q Loss: 50124.78063964844, Actor Loss: -11952.176361083984
Episode 4545: Time: 0.21590924263000488, Total Reward: 175.33218091407997, Q Loss: 56850.36535644531, Actor Loss: -11529.296173095703
Episode 4546: Time: 0.1511852741241455, Total Reward: 119.55091544086679, Q Loss: 31964.479248046875, Actor Loss: -7977.559783935547

Episode 4547: Time: 0.4306454658508301, Total Reward: 361.1188677041428, Q Loss: 106386.80224609375, Actor Loss: -22472.527404785156
Episode 4548: Time: 0.08657503128051758, Total Reward: 62.583761521180286, Q Loss: 19628.153198242188, Actor Loss: -4572.555816650391
Episode 4549: Time: 0.34493494033813477, Total Reward: 286.5981627258627, Q Loss: 102039.45837402344, Actor Loss: -17630.757354736328
Episode 4550: Time: 0.33417701721191406, Total Reward: 276.51212396759473, Q Loss: 84633.64050292969, Actor Loss: -18259.664489746094
Episode 4551: Time: 0.24823713302612305, Total Reward: 202.81593002958704, Q Loss: 64737.11633300781, Actor Loss: -13530.532348632812
Episode 4552: Time: 0.44182896614074707, Total Reward: 369.61800237957715, Q Loss: 120354.96435546875, Actor Loss: -23117.168975830078
Episode 4553: Time: 0.1508941650390625, Total Reward: 118.6050866567529, Q Loss: 42550.00061035156, Actor Loss: -8383.074462890625
Episode 4554: Time: 0.7530076503753662, Total Reward: 641.188672629326, Q Loss: 203162.41876220703, Actor Loss: -39841.753356933594
Episode 4555: Time: 0.2160632610321045, Total Reward: 174.6028552818505, Q Loss: 56437.804931640625, Actor Loss: -11596.005432128906
Episode 4556: Time: 0.28121304512023926, Total Reward: 230.63394408887447, Q Loss: 65848.01354980469, Actor Loss: -14390.261932373047
Episode 4557: Time: 0.7536146640777588, Total Reward: 637.7520682498374, Q Loss: 208240.36486816406, Actor Loss: -39457.19338989258
Episode 4558: Time: 0.32315611839294434, Total Reward: 268.46168418497706, Q Loss: 97727.22888183594, Actor Loss: -17411.222564697266
Episode 4559: Time: 0.2478489875793457, Total Reward: 201.03250436616622, Q Loss: 65764.314453125, Actor Loss: -12978.676940917969
Episode 4560: Time: 0.1831526756286621, Total Reward: 146.70807434562818, Q Loss: 54915.48791503906, Actor Loss: -9984.120300292969
Episode 4561: Time: 0.5059285163879395, Total Reward: 426.93330496036646, Q Loss: 139927.4451904297, Actor Loss: -26767.985748291016
Episode 4562: Time: 0.18333029747009277, Total Reward: 147.39762873053027, Q Loss: 61911.42687988281, Actor Loss: -9838.061462402344
Episode 4563: Time: 0.16228413581848145, Total Reward: 129.13146844749667, Q Loss: 47557.8720703125, Actor Loss: -8582.17529296875
Episode 4564: Time: 0.3234267234802246, Total Reward: 268.08827782989357, Q Loss: 85466.93133544922, Actor Loss: -17208.640533447266
Episode 4565: Time: 0.30193424224853516, Total Reward: 248.37672904461581, Q Loss: 86481.46264648438, Actor Loss: -15845.508483886719
Episode 4566: Time: 0.14013671875, Total Reward: 110.09130518218173, Q Loss: 40031.198974609375, Actor Loss: -7475.367401123047
Episode 4567: Time: 0.45389509201049805, Total Reward: 380.5192252782582, Q Loss: 132548.58367919922, Actor Loss: -23929.71859741211
Episode 4568: Time: 0.1729581356048584, Total Reward: 137.69317417557374, Q Loss: 52126.407958984375, Actor Loss: -9670.9423828125
Episode 4569: Time: 0.549968957901001, Total Reward: 461.297885129632, Q Loss: 157075.50567626953, Actor Loss: -29005.70541381836
Episode 4570: Time: 0.27996373176574707, Total Reward: 230.92561195310753, Q Loss: 70278.32995605469, Actor Loss: -14644.088470458984
Episode 4571: Time: 0.33423566818237305, Total Reward: 277.5429588555676, Q Loss: 95414.26977539062, Actor Loss: -17830.081970214844
Episode 4572: Time: 0.20499920845031738, Total Reward: 164.7260468212152, Q Loss: 67298.12524414062, Actor Loss: -10927.894561767578
Episode 4573: Time: 0.08647489547729492, Total Reward: 63.05624650598905, Q Loss: 27175.094970703125, Actor Loss: -4698.360107421875
Episode 4574: Time: 0.6238284111022949, Total Reward: 529.4601584872062, Q Loss: 163661.2528076172, Actor Loss: -33656.03387451172

Episode 4575: Time: 0.20497369766235352, Total Reward: 165.40424206418973, Q Loss: 52363.46057128906, Actor Loss: -11219.114868164062
Episode 4576: Time: 0.2047121524810791, Total Reward: 164.5779971445829, Q Loss: 65112.14001464844, Actor Loss: -11049.46533203125
Episode 4577: Time: 0.15060853958129883, Total Reward: 119.2534496810887, Q Loss: 47225.362365722656, Actor Loss: -8118.850524902344
Episode 4578: Time: 0.24794936180114746, Total Reward: 203.2975907460881, Q Loss: 76601.76586914062, Actor Loss: -13282.742126464844
Episode 4579: Time: 0.1614084243774414, Total Reward: 129.32307734180176, Q Loss: 39840.089111328125, Actor Loss: -8767.651611328125
Episode 4580: Time: 0.10827040672302246, Total Reward: 81.88056840344761, Q Loss: 27128.43603515625, Actor Loss: -5952.5711669921875
Episode 4581: Time: 0.09699130058288574, Total Reward: 72.47473604062029, Q Loss: 24234.667236328125, Actor Loss: -5025.391296386719
Episode 4582: Time: 0.18329501152038574, Total Reward: 147.38240377254667, Q Loss: 52168.85046386719, Actor Loss: -10053.280456542969
Episode 4583: Time: 0.33292412757873535, Total Reward: 275.76894445131677, Q Loss: 92464.37841796875, Actor Loss: -17702.655639648438
Episode 4584: Time: 0.24807476997375488, Total Reward: 201.25486985505043, Q Loss: 62458.33435058594, Actor Loss: -13227.171478271484
Episode 4585: Time: 0.22605156898498535, Total Reward: 183.3011285288279, Q Loss: 65478.08728027344, Actor Loss: -11975.440734863281
Episode 4586: Time: 0.19408631324768066, Total Reward: 156.36068769794102, Q Loss: 59892.276611328125, Actor Loss: -10264.209686279297
Episode 4587: Time: 0.3767373561859131, Total Reward: 313.6194940246121, Q Loss: 119985.58599853516, Actor Loss: -21024.730834960938
Episode 4588: Time: 0.1078946590423584, Total Reward: 82.5295677611747, Q Loss: 30700.3388671875, Actor Loss: -5930.0555419921875
Episode 4589: Time: 0.741523265838623, Total Reward: 629.5360609610668, Q Loss: 202810.37420654297, Actor Loss: -40581.59848022461
Episode 4590: Time: 0.269695520401001, Total Reward: 220.4413885398547, Q Loss: 65310.00457763672, Actor Loss: -14789.724182128906
Episode 4591: Time: 0.19430828094482422, Total Reward: 156.13697474911072, Q Loss: 53489.14074707031, Actor Loss: -10106.821472167969
Episode 4592: Time: 0.1520555019378662, Total Reward: 119.07542680144648, Q Loss: 40367.88806152344, Actor Loss: -8091.245910644531
Episode 4593: Time: 0.22683167457580566, Total Reward: 181.01180214895348, Q Loss: 70618.76782226562, Actor Loss: -12143.08432006836
Episode 4594: Time: 0.18349313735961914, Total Reward: 146.4944442213027, Q Loss: 54489.171630859375, Actor Loss: -10204.219177246094
Episode 4595: Time: 0.3124425411224365, Total Reward: 256.357350755997, Q Loss: 69783.53942871094, Actor Loss: -17046.049255371094
Episode 4596: Time: 0.1937732696533203, Total Reward: 156.9613434699432, Q Loss: 41562.34423828125, Actor Loss: -10437.43423461914
Episode 4597: Time: 0.4512965679168701, Total Reward: 377.2886651990193, Q Loss: 126709.83752441406, Actor Loss: -24884.333557128906
Episode 4598: Time: 0.18281769752502441, Total Reward: 146.9504519448563, Q Loss: 50142.19970703125, Actor Loss: -10014.930908203125
Episode 4599: Time: 0.20493793487548828, Total Reward: 165.38047331498615, Q Loss: 61680.53942871094, Actor Loss: -11185.45199584961
Validation Mean: 9355.168443440205, Validation Std: 0.220492093129164
saving model
Episode 4600: Time: 0.21765899658203125, Total Reward: 175.54430489283016, Q Loss: 54695.63684082031, Actor Loss: -11740.567565917969
Episode 4601: Time: 0.527764081954956, Total Reward: 444.6007842221891, Q Loss: 151642.5014038086, Actor Loss: -28379.367065429688

Episode 4602: Time: 0.10798907279968262, Total Reward: 81.48803347729084, Q Loss: 29343.885498046875, Actor Loss: -6137.236267089844
Episode 4603: Time: 0.2688589096069336, Total Reward: 222.13673804891314, Q Loss: 74723.24267578125, Actor Loss: -15007.5400390625
Episode 4604: Time: 0.5585329532623291, Total Reward: 471.6999303918512, Q Loss: 157188.12072753906, Actor Loss: -30448.13232421875
Episode 4605: Time: 0.1723020076751709, Total Reward: 137.898964397194, Q Loss: 57373.27575683594, Actor Loss: -8944.324127197266
Episode 4606: Time: 0.9252641201019287, Total Reward: 789.670446927678, Q Loss: 260293.4732055664, Actor Loss: -49621.73941040039
Episode 4607: Time: 0.4852113723754883, Total Reward: 409.12770223030503, Q Loss: 124382.943359375, Actor Loss: -26478.780487060547
Episode 4608: Time: 0.39905714988708496, Total Reward: 331.34634352797445, Q Loss: 115892.05908203125, Actor Loss: -22055.73358154297
Episode 4609: Time: 0.3452565670013428, Total Reward: 285.5165276828199, Q Loss: 104056.05834960938, Actor Loss: -18934.71728515625
Episode 4610: Time: 0.15113186836242676, Total Reward: 118.87879045173088, Q Loss: 38281.58264160156, Actor Loss: -8463.463470458984
Episode 4611: Time: 0.2696573734283447, Total Reward: 219.34560569784855, Q Loss: 90252.65710449219, Actor Loss: -14764.587677001953
Episode 4612: Time: 0.18332958221435547, Total Reward: 147.1267915152433, Q Loss: 74400.96154785156, Actor Loss: -9740.824340820312
Episode 4613: Time: 0.25889062881469727, Total Reward: 211.5992282451251, Q Loss: 70024.39343261719, Actor Loss: -14231.647491455078
Episode 4614: Time: 0.549325704574585, Total Reward: 463.8828034152108, Q Loss: 147575.34075927734, Actor Loss: -30499.489013671875
Episode 4615: Time: 0.2586479187011719, Total Reward: 211.99191154795307, Q Loss: 77145.84851074219, Actor Loss: -14448.877624511719
Episode 4616: Time: 0.2259082794189453, Total Reward: 183.97813152275737, Q Loss: 69067.83715820312, Actor Loss: -12607.823364257812
Episode 4617: Time: 0.483870267868042, Total Reward: 407.1613629579198, Q Loss: 131604.1580810547, Actor Loss: -26962.604278564453
Episode 4618: Time: 0.23645615577697754, Total Reward: 193.6599667035438, Q Loss: 65456.04992675781, Actor Loss: -13298.462036132812
Episode 4619: Time: 0.5367879867553711, Total Reward: 454.3853447374043, Q Loss: 164381.18981933594, Actor Loss: -29577.083374023438
Episode 4620: Time: 0.3339080810546875, Total Reward: 277.5997278717641, Q Loss: 104016.9609375, Actor Loss: -18343.071258544922
Episode 4621: Time: 0.3121068477630615, Total Reward: 259.60171970387694, Q Loss: 97536.71411132812, Actor Loss: -17614.768188476562
Episode 4622: Time: 0.30185723304748535, Total Reward: 249.1765024030423, Q Loss: 95570.50561523438, Actor Loss: -16909.978118896484
Episode 4623: Time: 0.6348013877868652, Total Reward: 539.4122420804589, Q Loss: 199644.5369873047, Actor Loss: -34938.9309387207
Episode 4624: Time: 0.4418611526489258, Total Reward: 366.9685420203024, Q Loss: 144178.2442626953, Actor Loss: -24777.467010498047
Episode 4625: Time: 0.615135669708252, Total Reward: 516.3118763480832, Q Loss: 196610.82934570312, Actor Loss: -34336.13391113281
Episode 4626: Time: 1.1403205394744873, Total Reward: 973.3518260527471, Q Loss: 331375.9063720703, Actor Loss: -63712.15213012695
Episode 4627: Time: 1.042372226715088, Total Reward: 890.8676098547177, Q Loss: 327837.2862548828, Actor Loss: -57370.035095214844
Episode 4628: Time: 0.2905430793762207, Total Reward: 239.98741076458964, Q Loss: 94854.23193359375, Actor Loss: -16012.742218017578
Episode 4629: Time: 0.5050148963928223, Total Reward: 426.68016340517784, Q Loss: 160010.07275390625, Actor Loss: -28676.1591796875

Episode 4630: Time: 0.37673139572143555, Total Reward: 314.8992562369309, Q Loss: 117203.19189453125, Actor Loss: -21342.66421508789
Episode 4631: Time: 0.37757301330566406, Total Reward: 314.06678461055236, Q Loss: 114851.92895507812, Actor Loss: -21685.192138671875
Episode 4632: Time: 0.37714338302612305, Total Reward: 313.2569827753029, Q Loss: 104010.17797851562, Actor Loss: -21209.26141357422
Episode 4633: Time: 0.17206788063049316, Total Reward: 137.56543886757026, Q Loss: 51179.81628417969, Actor Loss: -9544.552856445312
Episode 4634: Time: 1.319655179977417, Total Reward: 1134.7479960259564, Q Loss: 421623.76599121094, Actor Loss: -75892.19122314453
Episode 4635: Time: 0.5377187728881836, Total Reward: 454.1415239360412, Q Loss: 158235.00708007812, Actor Loss: -30760.272216796875
Episode 4636: Time: 0.37599778175354004, Total Reward: 315.4366150289687, Q Loss: 113677.68908691406, Actor Loss: -21444.537170410156
Episode 4637: Time: 0.5266268253326416, Total Reward: 444.61201753376326, Q Loss: 177166.9541015625, Actor Loss: -30172.648010253906
Episode 4638: Time: 0.4197220802307129, Total Reward: 351.6200195548051, Q Loss: 149148.2452392578, Actor Loss: -23938.240020751953
Episode 4639: Time: 0.3121774196624756, Total Reward: 257.2109864553365, Q Loss: 111155.76574707031, Actor Loss: -18228.786865234375
Episode 4640: Time: 0.32352328300476074, Total Reward: 268.25538222495254, Q Loss: 112269.05017089844, Actor Loss: -18474.17987060547
Episode 4641: Time: 0.20509576797485352, Total Reward: 166.20870601478407, Q Loss: 62535.18017578125, Actor Loss: -11839.429107666016
Episode 4642: Time: 0.3235650062561035, Total Reward: 268.39287559331933, Q Loss: 114962.52209472656, Actor Loss: -17966.082763671875
Episode 4643: Time: 0.2911067008972168, Total Reward: 240.35228898769992, Q Loss: 92628.42895507812, Actor Loss: -16615.235900878906
Episode 4644: Time: 0.55938720703125, Total Reward: 472.7247766408482, Q Loss: 187219.14099121094, Actor Loss: -32319.700164794922
Episode 4645: Time: 0.280200719833374, Total Reward: 229.68386968124702, Q Loss: 83917.4814453125, Actor Loss: -16300.679321289062
Episode 4646: Time: 0.1837465763092041, Total Reward: 147.43615881430256, Q Loss: 60197.484619140625, Actor Loss: -10557.3603515625
Episode 4647: Time: 0.3021259307861328, Total Reward: 248.841160811669, Q Loss: 101640.35412597656, Actor Loss: -17369.746215820312
Episode 4648: Time: 0.2589242458343506, Total Reward: 211.79128556064114, Q Loss: 97597.69848632812, Actor Loss: -15232.007690429688
Episode 4649: Time: 0.23749732971191406, Total Reward: 191.98556740399115, Q Loss: 87986.62451171875, Actor Loss: -13389.950592041016
Episode 4650: Time: 0.31226420402526855, Total Reward: 258.89859760303113, Q Loss: 110009.79711914062, Actor Loss: -17679.417419433594
Episode 4651: Time: 0.49521946907043457, Total Reward: 416.63192495277497, Q Loss: 166319.22674560547, Actor Loss: -29023.841827392578
Episode 4652: Time: 0.22628259658813477, Total Reward: 184.4416168423967, Q Loss: 68797.6279296875, Actor Loss: -12873.674377441406
Episode 4653: Time: 0.3986661434173584, Total Reward: 334.28476861487314, Q Loss: 123304.0400390625, Actor Loss: -22743.815185546875
Episode 4654: Time: 0.205031156539917, Total Reward: 165.04570037443335, Q Loss: 93683.64916992188, Actor Loss: -12123.754211425781
Episode 4655: Time: 0.2911059856414795, Total Reward: 240.37653206077908, Q Loss: 80940.24450683594, Actor Loss: -16214.370300292969
Episode 4656: Time: 0.17269682884216309, Total Reward: 137.83786658638041, Q Loss: 56424.829345703125, Actor Loss: -10170.867431640625
Episode 4657: Time: 0.32357048988342285, Total Reward: 266.03731770826244, Q Loss: 120232.3916015625, Actor Loss: -19195.94158935547

Episode 4658: Time: 0.33440470695495605, Total Reward: 276.5628249855359, Q Loss: 119278.94177246094, Actor Loss: -19573.445861816406
Episode 4659: Time: 0.3557870388031006, Total Reward: 295.8043965761229, Q Loss: 124478.32971191406, Actor Loss: -20372.828155517578
Episode 4660: Time: 0.24805021286010742, Total Reward: 202.60115054504035, Q Loss: 73172.77770996094, Actor Loss: -14501.678771972656
Episode 4661: Time: 0.3563244342803955, Total Reward: 296.98160929261275, Q Loss: 109220.74731445312, Actor Loss: -20653.21371459961
Episode 4662: Time: 0.20524859428405762, Total Reward: 166.1273712637413, Q Loss: 62067.175537109375, Actor Loss: -11549.932495117188
Episode 4663: Time: 0.5068144798278809, Total Reward: 425.0277936172853, Q Loss: 155577.7882080078, Actor Loss: -28455.58172607422
Episode 4664: Time: 0.3665738105773926, Total Reward: 304.70385974065357, Q Loss: 126273.15490722656, Actor Loss: -21334.746459960938
Episode 4665: Time: 0.7849066257476807, Total Reward: 667.9473572291733, Q Loss: 249027.2462158203, Actor Loss: -46056.45379638672
Episode 4666: Time: 0.12942218780517578, Total Reward: 100.23600922782842, Q Loss: 41048.393798828125, Actor Loss: -6902.724029541016
Episode 4667: Time: 0.20526814460754395, Total Reward: 165.97171821640345, Q Loss: 56915.060302734375, Actor Loss: -11760.944793701172
Episode 4668: Time: 0.37822937965393066, Total Reward: 312.1570041028677, Q Loss: 126277.375, Actor Loss: -21869.604431152344
Episode 4669: Time: 0.1725602149963379, Total Reward: 137.1596508991841, Q Loss: 54339.15954589844, Actor Loss: -9859.938293457031
Episode 4670: Time: 0.42052721977233887, Total Reward: 352.33680846701566, Q Loss: 145787.5135498047, Actor Loss: -24472.242950439453
Episode 4671: Time: 0.34476470947265625, Total Reward: 286.66912038897993, Q Loss: 117446.14306640625, Actor Loss: -20671.15170288086
Episode 4672: Time: 0.26963090896606445, Total Reward: 220.9767860713151, Q Loss: 88484.28771972656, Actor Loss: -15509.780700683594
Episode 4673: Time: 0.08648276329040527, Total Reward: 62.83344450810749, Q Loss: 25996.000732421875, Actor Loss: -4879.404113769531
Episode 4674: Time: 0.2481675148010254, Total Reward: 201.81343691955547, Q Loss: 84612.02551269531, Actor Loss: -14769.360229492188
Episode 4675: Time: 0.34496426582336426, Total Reward: 286.3858246545118, Q Loss: 116404.06103515625, Actor Loss: -20462.166442871094
Episode 4676: Time: 0.31203246116638184, Total Reward: 258.96594463015293, Q Loss: 123825.80590820312, Actor Loss: -18376.582641601562
Episode 4677: Time: 0.4307212829589844, Total Reward: 361.24723887837547, Q Loss: 148423.5928955078, Actor Loss: -25464.04052734375
Episode 4678: Time: 0.291095495223999, Total Reward: 238.31343188320028, Q Loss: 110051.12719726562, Actor Loss: -17203.076599121094
Episode 4679: Time: 0.24841856956481934, Total Reward: 201.9597073298185, Q Loss: 78099.50158691406, Actor Loss: -13964.045684814453
Episode 4680: Time: 0.2908353805541992, Total Reward: 240.15402737651596, Q Loss: 122720.64147949219, Actor Loss: -17273.294006347656
Episode 4681: Time: 0.32311439514160156, Total Reward: 265.8252695189608, Q Loss: 109917.01525878906, Actor Loss: -19086.831909179688
Episode 4682: Time: 0.12936067581176758, Total Reward: 100.06190578917035, Q Loss: 40788.224853515625, Actor Loss: -7627.2108154296875
Episode 4683: Time: 0.1838514804840088, Total Reward: 147.64272278325393, Q Loss: 70418.9619140625, Actor Loss: -11122.681396484375
Episode 4684: Time: 0.17235469818115234, Total Reward: 137.99998973961561, Q Loss: 52193.77233886719, Actor Loss: -10212.83447265625
Episode 4685: Time: 0.4846634864807129, Total Reward: 407.69560266593214, Q Loss: 183751.28540039062, Actor Loss: -28719.177642822266

Episode 4686: Time: 0.5491933822631836, Total Reward: 463.7427155491329, Q Loss: 201269.19897460938, Actor Loss: -32153.213317871094
Episode 4687: Time: 0.17250752449035645, Total Reward: 138.3949515620949, Q Loss: 66906.18188476562, Actor Loss: -10225.774475097656
Episode 4688: Time: 0.2910032272338867, Total Reward: 239.0330021528723, Q Loss: 112347.45178222656, Actor Loss: -17078.40478515625
Episode 4689: Time: 0.3233504295349121, Total Reward: 267.3997033651977, Q Loss: 105405.96508789062, Actor Loss: -19147.853942871094
Episode 4690: Time: 0.2914009094238281, Total Reward: 240.55847345795308, Q Loss: 80435.33435058594, Actor Loss: -17364.62371826172
Episode 4691: Time: 0.26983046531677246, Total Reward: 221.90602352536794, Q Loss: 79808.05126953125, Actor Loss: -15401.243713378906
Episode 4692: Time: 0.4846358299255371, Total Reward: 408.5936115542584, Q Loss: 165385.71850585938, Actor Loss: -29112.935119628906
Episode 4693: Time: 0.3876073360443115, Total Reward: 323.0286345855583, Q Loss: 146385.0574951172, Actor Loss: -23190.397033691406
Episode 4694: Time: 0.4314084053039551, Total Reward: 360.33486307530956, Q Loss: 169870.31860351562, Actor Loss: -25953.519104003906
Episode 4695: Time: 0.22657346725463867, Total Reward: 184.96666387807693, Q Loss: 81759.86694335938, Actor Loss: -13531.915893554688
Episode 4696: Time: 0.2697484493255615, Total Reward: 222.12792660783143, Q Loss: 98924.603515625, Actor Loss: -16482.443359375
Episode 4697: Time: 0.5274386405944824, Total Reward: 444.95873331211374, Q Loss: 180480.80908203125, Actor Loss: -30563.11834716797
Episode 4698: Time: 0.5261328220367432, Total Reward: 441.4019733024598, Q Loss: 181547.48693847656, Actor Loss: -31111.46533203125
Episode 4699: Time: 0.23703241348266602, Total Reward: 193.43751979449536, Q Loss: 76541.28942871094, Actor Loss: -14254.182678222656
Validation Mean: 9355.480597753058, Validation Std: 0.586135648491027
saving model
Episode 4700: Time: 0.1632544994354248, Total Reward: 127.97654802937893, Q Loss: 55833.77880859375, Actor Loss: -9649.40771484375
Episode 4701: Time: 0.08715629577636719, Total Reward: 61.49092578078924, Q Loss: 29806.5830078125, Actor Loss: -4934.771057128906
Episode 4702: Time: 1.0219988822937012, Total Reward: 871.3921279598898, Q Loss: 345825.9757080078, Actor Loss: -61491.088287353516
Episode 4703: Time: 0.4415018558502197, Total Reward: 369.23792202336705, Q Loss: 152058.03479003906, Actor Loss: -26856.35531616211
Episode 4704: Time: 0.20487427711486816, Total Reward: 164.8730655334302, Q Loss: 77190.25561523438, Actor Loss: -12500.641662597656
Episode 4705: Time: 0.2156989574432373, Total Reward: 175.38812333270712, Q Loss: 68905.60083007812, Actor Loss: -12666.867584228516
Episode 4706: Time: 0.2585480213165283, Total Reward: 212.27245793841251, Q Loss: 91558.15747070312, Actor Loss: -16161.641174316406
Episode 4707: Time: 0.1726245880126953, Total Reward: 138.05159646941624, Q Loss: 73069.48321533203, Actor Loss: -10306.810485839844
Episode 4708: Time: 0.18343138694763184, Total Reward: 146.50135002232224, Q Loss: 66571.11804199219, Actor Loss: -11331.4765625
Episode 4709: Time: 0.4204905033111572, Total Reward: 352.0695823771813, Q Loss: 143330.388671875, Actor Loss: -25309.806884765625
Episode 4710: Time: 0.30240726470947266, Total Reward: 249.09947589132247, Q Loss: 101698.11059570312, Actor Loss: -18363.654663085938
Episode 4711: Time: 0.3560299873352051, Total Reward: 295.1302022370227, Q Loss: 145682.70849609375, Actor Loss: -20546.976989746094
Episode 4712: Time: 0.42012548446655273, Total Reward: 352.1669848665775, Q Loss: 164922.25842285156, Actor Loss: -26049.692504882812

Episode 4713: Time: 0.42006611824035645, Total Reward: 350.98619216252996, Q Loss: 136776.89184570312, Actor Loss: -24983.321838378906
Episode 4714: Time: 0.09746098518371582, Total Reward: 72.93671585793506, Q Loss: 30329.44384765625, Actor Loss: -5702.19482421875
Episode 4715: Time: 0.31308746337890625, Total Reward: 258.7219643219733, Q Loss: 112408.32604980469, Actor Loss: -18639.34423828125
Episode 4716: Time: 0.625007152557373, Total Reward: 528.6473644423088, Q Loss: 218277.58923339844, Actor Loss: -37870.90756225586
Episode 4717: Time: 0.677950382232666, Total Reward: 575.0039912853339, Q Loss: 249360.7075805664, Actor Loss: -41185.18688964844
Episode 4718: Time: 0.4741954803466797, Total Reward: 398.7466503958643, Q Loss: 161746.64190673828, Actor Loss: -28296.326416015625
Episode 4719: Time: 0.3237340450286865, Total Reward: 267.117748105438, Q Loss: 103329.57043457031, Actor Loss: -19414.021850585938
Episode 4720: Time: 0.570204496383667, Total Reward: 483.5641095869676, Q Loss: 181676.85205078125, Actor Loss: -34335.27557373047
Episode 4721: Time: 0.559685468673706, Total Reward: 471.75902175180755, Q Loss: 202478.87841796875, Actor Loss: -34833.974853515625
Episode 4722: Time: 0.15111589431762695, Total Reward: 119.15425682641143, Q Loss: 46894.91174316406, Actor Loss: -9284.722534179688
Episode 4723: Time: 0.420013427734375, Total Reward: 350.0286810773529, Q Loss: 142212.67602539062, Actor Loss: -25654.586486816406
Episode 4724: Time: 0.2702198028564453, Total Reward: 220.91196843407852, Q Loss: 98943.46948242188, Actor Loss: -16486.26336669922
Episode 4725: Time: 0.2377026081085205, Total Reward: 192.57299091031504, Q Loss: 89486.14428710938, Actor Loss: -14498.028076171875
Episode 4726: Time: 0.2052173614501953, Total Reward: 166.05053929148343, Q Loss: 87373.44946289062, Actor Loss: -13042.924560546875
Episode 4727: Time: 0.4525737762451172, Total Reward: 378.8362622570592, Q Loss: 153042.98474121094, Actor Loss: -27790.20281982422
Episode 4728: Time: 0.29121851921081543, Total Reward: 240.56378359683785, Q Loss: 115989.23400878906, Actor Loss: -17827.87109375
Episode 4729: Time: 0.18349003791809082, Total Reward: 147.38546134562029, Q Loss: 61863.91296386719, Actor Loss: -11710.574401855469
Episode 4730: Time: 0.08668994903564453, Total Reward: 62.63673031035214, Q Loss: 30950.197265625, Actor Loss: -5058.559997558594
Episode 4731: Time: 0.15099048614501953, Total Reward: 118.63159238120501, Q Loss: 67441.60034179688, Actor Loss: -9307.884094238281
Episode 4732: Time: 0.23734641075134277, Total Reward: 193.55915418110243, Q Loss: 102250.57006835938, Actor Loss: -14839.999633789062
Episode 4733: Time: 0.10808253288269043, Total Reward: 82.2000973962639, Q Loss: 30352.609130859375, Actor Loss: -6603.193115234375
Episode 4734: Time: 0.32331109046936035, Total Reward: 267.2218513442437, Q Loss: 110113.27758789062, Actor Loss: -19888.923248291016
Episode 4735: Time: 0.6149260997772217, Total Reward: 517.9626704282463, Q Loss: 252216.78930664062, Actor Loss: -38256.82635498047
Episode 4736: Time: 0.20542335510253906, Total Reward: 165.3559621156156, Q Loss: 72757.74584960938, Actor Loss: -12235.317565917969
Episode 4737: Time: 0.2698383331298828, Total Reward: 219.03529182930887, Q Loss: 98151.14807128906, Actor Loss: -17093.971313476562
Episode 4738: Time: 0.2590808868408203, Total Reward: 212.94789515550244, Q Loss: 85245.62268066406, Actor Loss: -16619.263061523438
Episode 4739: Time: 0.2267780303955078, Total Reward: 185.0889698136876, Q Loss: 82803.81823730469, Actor Loss: -13786.415893554688
Episode 4740: Time: 0.49605321884155273, Total Reward: 417.1748522384077, Q Loss: 176129.1533203125, Actor Loss: -30935.565063476562

Episode 4741: Time: 0.4851362705230713, Total Reward: 406.3163268753061, Q Loss: 177363.77612304688, Actor Loss: -30692.36407470703
Episode 4742: Time: 0.6356160640716553, Total Reward: 536.8332856276882, Q Loss: 237554.20141601562, Actor Loss: -38828.227294921875
Episode 4743: Time: 0.1621692180633545, Total Reward: 128.63849535347404, Q Loss: 59806.32482910156, Actor Loss: -10035.025634765625
Episode 4744: Time: 0.3775012493133545, Total Reward: 315.6230922806988, Q Loss: 147103.75708007812, Actor Loss: -23011.520568847656
Episode 4745: Time: 0.52817702293396, Total Reward: 443.5843260230204, Q Loss: 188856.3145751953, Actor Loss: -32329.920776367188
Episode 4746: Time: 0.18334078788757324, Total Reward: 145.99623523099274, Q Loss: 69531.69592285156, Actor Loss: -11536.813110351562
Episode 4747: Time: 0.3127439022064209, Total Reward: 257.5274332648174, Q Loss: 111946.54187011719, Actor Loss: -19382.85369873047
Episode 4748: Time: 0.14014148712158203, Total Reward: 108.64481713666832, Q Loss: 35729.16662597656, Actor Loss: -8706.084777832031
Episode 4749: Time: 0.5486388206481934, Total Reward: 463.8344852755152, Q Loss: 205999.29809570312, Actor Loss: -33918.994873046875
Episode 4750: Time: 0.22638964653015137, Total Reward: 184.95549793341235, Q Loss: 82928.14221191406, Actor Loss: -14104.317077636719
Episode 4751: Time: 0.484039306640625, Total Reward: 408.6466183392629, Q Loss: 179237.47509765625, Actor Loss: -30664.284057617188
Episode 4752: Time: 0.09706735610961914, Total Reward: 72.50665178124255, Q Loss: 42938.83044433594, Actor Loss: -6144.278137207031
Episode 4753: Time: 0.2804405689239502, Total Reward: 230.3987231172334, Q Loss: 92980.13659667969, Actor Loss: -17854.710083007812
Episode 4754: Time: 0.20452642440795898, Total Reward: 164.75985459815942, Q Loss: 92161.7939453125, Actor Loss: -12921.340942382812
Episode 4755: Time: 0.10819721221923828, Total Reward: 81.67318464040092, Q Loss: 52738.576171875, Actor Loss: -6401.648193359375
Episode 4756: Time: 0.1622636318206787, Total Reward: 128.94313718985302, Q Loss: 62328.49328613281, Actor Loss: -10309.991455078125
Episode 4757: Time: 0.42017054557800293, Total Reward: 351.89967822061715, Q Loss: 150350.880859375, Actor Loss: -26939.358520507812
Episode 4758: Time: 0.09720516204833984, Total Reward: 72.76116130999684, Q Loss: 37831.823486328125, Actor Loss: -6026.0836181640625
Episode 4759: Time: 0.3237133026123047, Total Reward: 266.7559993374429, Q Loss: 130765.83972167969, Actor Loss: -20423.636596679688
Episode 4760: Time: 0.32370686531066895, Total Reward: 266.1259908552821, Q Loss: 143669.81860351562, Actor Loss: -20392.46240234375
Episode 4761: Time: 0.29175519943237305, Total Reward: 238.6768186864523, Q Loss: 114136.74877929688, Actor Loss: -18112.014099121094
Episode 4762: Time: 0.30187249183654785, Total Reward: 250.23983951099132, Q Loss: 103883.08227539062, Actor Loss: -19097.81915283203
Episode 4763: Time: 0.18321704864501953, Total Reward: 146.64069773040984, Q Loss: 86563.71069335938, Actor Loss: -12009.682556152344
Episode 4764: Time: 0.16212701797485352, Total Reward: 128.3742828478847, Q Loss: 59484.52844238281, Actor Loss: -10416.98779296875
Episode 4765: Time: 0.2804892063140869, Total Reward: 231.33169542379088, Q Loss: 99014.96923828125, Actor Loss: -17179.241638183594
Episode 4766: Time: 0.5379409790039062, Total Reward: 454.3210573104758, Q Loss: 193282.6474609375, Actor Loss: -34106.21032714844
Episode 4767: Time: 0.24803709983825684, Total Reward: 203.1995473265712, Q Loss: 89231.53576660156, Actor Loss: -15848.063781738281
Episode 4768: Time: 0.3126034736633301, Total Reward: 257.1076859515676, Q Loss: 123201.11669921875, Actor Loss: -19654.82403564453

Episode 4769: Time: 0.2804901599884033, Total Reward: 229.44834447242405, Q Loss: 133005.86352539062, Actor Loss: -18551.684143066406
Episode 4770: Time: 0.06496930122375488, Total Reward: 44.49027167863935, Q Loss: 21583.820556640625, Actor Loss: -3950.808349609375
Episode 4771: Time: 0.2694883346557617, Total Reward: 221.82134042746515, Q Loss: 103420.59582519531, Actor Loss: -17071.925659179688
Episode 4772: Time: 0.41973876953125, Total Reward: 347.98793303950396, Q Loss: 174807.2901611328, Actor Loss: -26027.62481689453
Episode 4773: Time: 0.4736213684082031, Total Reward: 397.47240152828965, Q Loss: 188431.1278076172, Actor Loss: -30582.885498046875
Episode 4774: Time: 0.3670165538787842, Total Reward: 303.9918807298866, Q Loss: 127664.56591796875, Actor Loss: -23002.31951904297
Episode 4775: Time: 0.9380958080291748, Total Reward: 798.6877573910424, Q Loss: 334608.7160644531, Actor Loss: -59194.60876464844
Episode 4776: Time: 0.1628119945526123, Total Reward: 128.76803156293872, Q Loss: 62897.65576171875, Actor Loss: -10472.315185546875
Episode 4777: Time: 0.1303703784942627, Total Reward: 99.9795734275108, Q Loss: 33527.67395019531, Actor Loss: -8079.975036621094
Episode 4778: Time: 0.2488548755645752, Total Reward: 202.95989624838938, Q Loss: 96625.91723632812, Actor Loss: -15446.055969238281
Episode 4779: Time: 0.6364569664001465, Total Reward: 538.1924583905859, Q Loss: 272949.95349121094, Actor Loss: -41603.01202392578
Episode 4780: Time: 0.539358377456665, Total Reward: 452.54987804622175, Q Loss: 183324.32177734375, Actor Loss: -34824.55773925781
Episode 4781: Time: 0.5069215297698975, Total Reward: 427.42038399371324, Q Loss: 191208.93920898438, Actor Loss: -32533.66925048828
Episode 4782: Time: 0.194413423538208, Total Reward: 156.71028702380508, Q Loss: 77709.81628417969, Actor Loss: -12113.256774902344
Episode 4783: Time: 0.7658708095550537, Total Reward: 649.6368673905856, Q Loss: 322221.62829589844, Actor Loss: -49275.149475097656
Episode 4784: Time: 0.5613789558410645, Total Reward: 471.2253099370601, Q Loss: 236523.56225585938, Actor Loss: -36873.402770996094
Episode 4785: Time: 0.45348072052001953, Total Reward: 380.22119938535707, Q Loss: 180941.17504882812, Actor Loss: -29033.714416503906
Episode 4786: Time: 0.2486250400543213, Total Reward: 202.98824532023116, Q Loss: 119936.65258789062, Actor Loss: -15996.421813964844
Episode 4787: Time: 0.2705361843109131, Total Reward: 221.94220825507676, Q Loss: 103799.10095214844, Actor Loss: -17556.095275878906
Episode 4788: Time: 0.37862205505371094, Total Reward: 313.51195862636837, Q Loss: 142390.00268554688, Actor Loss: -24579.41375732422
Episode 4789: Time: 0.16213631629943848, Total Reward: 128.88606618749478, Q Loss: 82791.03247070312, Actor Loss: -10119.261413574219
Episode 4790: Time: 0.6787443161010742, Total Reward: 575.3479478096618, Q Loss: 297544.49841308594, Actor Loss: -44275.86260986328
Episode 4791: Time: 0.5068531036376953, Total Reward: 425.5933319111858, Q Loss: 196824.82958984375, Actor Loss: -32636.999877929688
Episode 4792: Time: 0.2704429626464844, Total Reward: 221.0205099535472, Q Loss: 109855.27416992188, Actor Loss: -17021.006286621094
Episode 4793: Time: 0.19457650184631348, Total Reward: 156.59863255316353, Q Loss: 79543.57568359375, Actor Loss: -12624.25927734375
Episode 4794: Time: 0.30275416374206543, Total Reward: 249.50077062698855, Q Loss: 103947.02233886719, Actor Loss: -19698.817749023438
Episode 4795: Time: 0.7339093685150146, Total Reward: 621.8219013234896, Q Loss: 330615.30822753906, Actor Loss: -47860.73645019531
Episode 4796: Time: 0.25946831703186035, Total Reward: 211.78804199877013, Q Loss: 86286.63793945312, Actor Loss: -16673.55487060547

Episode 4797: Time: 0.2811570167541504, Total Reward: 228.1711566831635, Q Loss: 121736.55444335938, Actor Loss: -18798.521850585938
Episode 4798: Time: 0.18400859832763672, Total Reward: 147.16135909774908, Q Loss: 88408.22192382812, Actor Loss: -11768.283142089844
Episode 4799: Time: 0.47504401206970215, Total Reward: 398.6550299354787, Q Loss: 202716.94787597656, Actor Loss: -30807.620239257812
Validation Mean: 9356.45403324444, Validation Std: 0.20566760543733667
saving model
Episode 4800: Time: 0.33690500259399414, Total Reward: 276.750380006866, Q Loss: 120093.7841796875, Actor Loss: -22449.214233398438
Episode 4801: Time: 0.21632623672485352, Total Reward: 174.69757262495412, Q Loss: 96280.21643066406, Actor Loss: -13898.289916992188
Episode 4802: Time: 0.11880373954772949, Total Reward: 91.09176850989071, Q Loss: 49324.943603515625, Actor Loss: -7890.841369628906
Episode 4803: Time: 0.3561420440673828, Total Reward: 296.47428673100933, Q Loss: 153237.7198486328, Actor Loss: -23542.867614746094
Episode 4804: Time: 0.5824594497680664, Total Reward: 490.05959206379583, Q Loss: 230718.2772216797, Actor Loss: -38491.479553222656
Episode 4805: Time: 0.4097585678100586, Total Reward: 341.4277148043007, Q Loss: 200361.58264160156, Actor Loss: -26740.777893066406
Episode 4806: Time: 0.39975476264953613, Total Reward: 333.0906457912528, Q Loss: 185628.8280029297, Actor Loss: -26423.434814453125
Episode 4807: Time: 0.19465374946594238, Total Reward: 156.2848115197302, Q Loss: 93238.76770019531, Actor Loss: -12822.292846679688
Episode 4808: Time: 0.5071859359741211, Total Reward: 423.5367690296117, Q Loss: 188495.7801513672, Actor Loss: -32746.686401367188
Episode 4809: Time: 0.1618945598602295, Total Reward: 129.0103638771233, Q Loss: 80156.56665039062, Actor Loss: -10787.068237304688
Episode 4810: Time: 0.2702598571777344, Total Reward: 221.11155258449404, Q Loss: 125744.35498046875, Actor Loss: -17858.822814941406
Episode 4811: Time: 0.22699427604675293, Total Reward: 184.9418406032715, Q Loss: 106314.05322265625, Actor Loss: -15055.543212890625
Episode 4812: Time: 0.15130305290222168, Total Reward: 118.4883478716119, Q Loss: 61075.927490234375, Actor Loss: -9825.830200195312
Episode 4813: Time: 0.28084492683410645, Total Reward: 227.51939979679796, Q Loss: 139813.38903808594, Actor Loss: -18490.82159423828
Episode 4814: Time: 0.4958658218383789, Total Reward: 417.4035642680926, Q Loss: 228984.08337402344, Actor Loss: -32966.56982421875
Episode 4815: Time: 0.18345046043395996, Total Reward: 146.8876218237804, Q Loss: 75064.55200195312, Actor Loss: -11876.426696777344
Episode 4816: Time: 0.1625533103942871, Total Reward: 129.20377342331543, Q Loss: 72230.05285644531, Actor Loss: -10696.238220214844
Episode 4817: Time: 0.31316685676574707, Total Reward: 257.59756376364714, Q Loss: 143072.6358642578, Actor Loss: -20681.150329589844
Episode 4818: Time: 0.2490065097808838, Total Reward: 201.9623905107071, Q Loss: 88581.36157226562, Actor Loss: -16604.417846679688
Episode 4819: Time: 0.28090906143188477, Total Reward: 229.60788741639092, Q Loss: 114242.97888183594, Actor Loss: -18361.155334472656
Episode 4820: Time: 0.4319922924041748, Total Reward: 360.7910314878633, Q Loss: 182673.2950439453, Actor Loss: -28523.64129638672
Episode 4821: Time: 0.3347635269165039, Total Reward: 276.1271242563421, Q Loss: 128299.13403320312, Actor Loss: -22436.999145507812
Episode 4822: Time: 0.18342995643615723, Total Reward: 146.96860988865734, Q Loss: 96111.09448242188, Actor Loss: -11871.542419433594
Episode 4823: Time: 0.5497899055480957, Total Reward: 463.7017211225026, Q Loss: 233363.08081054688, Actor Loss: -36343.047119140625

Episode 4824: Time: 0.5391292572021484, Total Reward: 450.7633192600093, Q Loss: 247337.0167236328, Actor Loss: -36134.088928222656
Episode 4825: Time: 0.30204081535339355, Total Reward: 247.5901419530288, Q Loss: 131075.8936767578, Actor Loss: -19701.86962890625
Episode 4826: Time: 0.2590980529785156, Total Reward: 211.90465161883841, Q Loss: 121844.17712402344, Actor Loss: -17090.8740234375
Episode 4827: Time: 0.2702009677886963, Total Reward: 220.19698528197944, Q Loss: 129743.53247070312, Actor Loss: -17558.638916015625
Episode 4828: Time: 0.44206881523132324, Total Reward: 369.6562786880897, Q Loss: 204099.54614257812, Actor Loss: -29225.28497314453
Episode 4829: Time: 0.4312422275543213, Total Reward: 360.7643545803618, Q Loss: 177976.06579589844, Actor Loss: -28326.67218017578
Episode 4830: Time: 0.23772811889648438, Total Reward: 191.1832733969706, Q Loss: 91600.63439941406, Actor Loss: -15954.207824707031
Episode 4831: Time: 0.16195225715637207, Total Reward: 128.77372071450307, Q Loss: 70027.16137695312, Actor Loss: -10627.839233398438
Episode 4832: Time: 0.2918233871459961, Total Reward: 238.11735236116814, Q Loss: 133237.16918945312, Actor Loss: -18922.717834472656
Episode 4833: Time: 0.24834465980529785, Total Reward: 201.61191750105024, Q Loss: 110515.30590820312, Actor Loss: -16359.671936035156
Episode 4834: Time: 0.2913193702697754, Total Reward: 239.60898482332277, Q Loss: 105412.20483398438, Actor Loss: -19330.272216796875
Episode 4835: Time: 0.19463539123535156, Total Reward: 155.36242690196752, Q Loss: 81465.05810546875, Actor Loss: -13014.134460449219
Episode 4836: Time: 0.26969170570373535, Total Reward: 218.99878363483683, Q Loss: 140856.6123046875, Actor Loss: -18281.055908203125
Episode 4837: Time: 0.24918675422668457, Total Reward: 203.82687523383944, Q Loss: 116235.80554199219, Actor Loss: -16722.9267578125
Episode 4838: Time: 0.5178520679473877, Total Reward: 436.1920307198503, Q Loss: 243073.2567138672, Actor Loss: -35104.94152832031
Episode 4839: Time: 0.1621708869934082, Total Reward: 128.9172103980307, Q Loss: 84065.24841308594, Actor Loss: -11036.215637207031
Episode 4840: Time: 0.1514577865600586, Total Reward: 118.00727294643413, Q Loss: 66196.572265625, Actor Loss: -10268.072326660156
Episode 4841: Time: 0.357008695602417, Total Reward: 296.84426605501, Q Loss: 152207.74822998047, Actor Loss: -24298.093383789062
Episode 4842: Time: 0.3025038242340088, Total Reward: 249.81139792307266, Q Loss: 135055.74536132812, Actor Loss: -20561.24871826172
Episode 4843: Time: 0.35593152046203613, Total Reward: 297.0312830835067, Q Loss: 145684.35815429688, Actor Loss: -23210.475219726562
Episode 4844: Time: 0.1944284439086914, Total Reward: 156.035106936452, Q Loss: 72289.22973632812, Actor Loss: -13264.351806640625
Episode 4845: Time: 0.3346529006958008, Total Reward: 277.33091241310717, Q Loss: 121481.1538696289, Actor Loss: -22847.169189453125
Episode 4846: Time: 0.28096938133239746, Total Reward: 230.08456374962716, Q Loss: 131429.3388671875, Actor Loss: -18922.517333984375
Episode 4847: Time: 0.28100132942199707, Total Reward: 230.71194217061117, Q Loss: 121389.85144042969, Actor Loss: -18775.152954101562
Episode 4848: Time: 0.18383049964904785, Total Reward: 146.94298887578364, Q Loss: 77747.23364257812, Actor Loss: -12646.965698242188
Episode 4849: Time: 0.11926126480102539, Total Reward: 91.36535358782379, Q Loss: 47930.125732421875, Actor Loss: -8366.970581054688
Episode 4850: Time: 0.2160015106201172, Total Reward: 174.27636222807172, Q Loss: 114915.65893554688, Actor Loss: -14603.470458984375
Episode 4851: Time: 0.7437775135040283, Total Reward: 629.4084623930038, Q Loss: 356958.3200683594, Actor Loss: -50266.82080078125

Episode 4852: Time: 0.24854779243469238, Total Reward: 202.8558810533936, Q Loss: 115214.3603515625, Actor Loss: -17047.82354736328
Episode 4853: Time: 0.40987682342529297, Total Reward: 341.96491684996823, Q Loss: 182245.45190429688, Actor Loss: -27587.579528808594
Episode 4854: Time: 0.27013731002807617, Total Reward: 220.12463757837548, Q Loss: 106010.92932128906, Actor Loss: -18555.982055664062
Episode 4855: Time: 0.34574222564697266, Total Reward: 286.6310839024985, Q Loss: 159836.5675048828, Actor Loss: -24087.728149414062
Episode 4856: Time: 0.4743049144744873, Total Reward: 398.2060925417331, Q Loss: 215726.0460205078, Actor Loss: -32733.79461669922
Episode 4857: Time: 0.3452603816986084, Total Reward: 285.82353700475124, Q Loss: 159023.29931640625, Actor Loss: -23408.311462402344
Episode 4858: Time: 0.19438886642456055, Total Reward: 156.3661948978184, Q Loss: 99971.02685546875, Actor Loss: -12881.872741699219
Episode 4859: Time: 0.42151951789855957, Total Reward: 351.862434372897, Q Loss: 183741.95434570312, Actor Loss: -28386.280395507812
Episode 4860: Time: 0.4108116626739502, Total Reward: 343.03697581298746, Q Loss: 225655.55029296875, Actor Loss: -27819.15576171875
Episode 4861: Time: 0.10878777503967285, Total Reward: 81.56288402885274, Q Loss: 45841.958251953125, Actor Loss: -7320.352111816406
Episode 4862: Time: 0.2490062713623047, Total Reward: 201.83771983282838, Q Loss: 124430.73950195312, Actor Loss: -16945.386352539062
Episode 4863: Time: 0.2815117835998535, Total Reward: 228.9234793866762, Q Loss: 138704.61206054688, Actor Loss: -19502.400512695312
Episode 4864: Time: 0.5390481948852539, Total Reward: 455.11080902301404, Q Loss: 243074.4326171875, Actor Loss: -36868.29504394531
Episode 4865: Time: 0.4091815948486328, Total Reward: 342.591585518168, Q Loss: 196414.03686523438, Actor Loss: -28549.850158691406
Episode 4866: Time: 0.14021801948547363, Total Reward: 108.77230427291114, Q Loss: 64939.052734375, Actor Loss: -9479.819152832031
Episode 4867: Time: 0.28089046478271484, Total Reward: 230.5563562986412, Q Loss: 131989.31896972656, Actor Loss: -19426.53778076172
Episode 4868: Time: 0.5171623229980469, Total Reward: 434.0607178077064, Q Loss: 202926.4071044922, Actor Loss: -35593.208068847656
Episode 4869: Time: 0.34520792961120605, Total Reward: 286.5957876580672, Q Loss: 161859.78454589844, Actor Loss: -23689.59375
Episode 4870: Time: 0.1723935604095459, Total Reward: 137.57005054234696, Q Loss: 83882.87109375, Actor Loss: -11839.457336425781
Episode 4871: Time: 0.10856318473815918, Total Reward: 82.19708240664573, Q Loss: 52941.04895019531, Actor Loss: -7264.755676269531
Episode 4872: Time: 0.2481977939605713, Total Reward: 202.54763375824422, Q Loss: 112396.31298828125, Actor Loss: -17532.36749267578
Episode 4873: Time: 0.08648943901062012, Total Reward: 63.20853965212507, Q Loss: 30313.500854492188, Actor Loss: -5969.981018066406
Episode 4874: Time: 0.5279076099395752, Total Reward: 444.57878853196706, Q Loss: 227704.9093017578, Actor Loss: -36341.33514404297
Episode 4875: Time: 0.26999855041503906, Total Reward: 220.97664271858662, Q Loss: 127399.14697265625, Actor Loss: -18661.651916503906
Episode 4876: Time: 0.3561837673187256, Total Reward: 295.552191837032, Q Loss: 160460.88134765625, Actor Loss: -24283.719482421875
Episode 4877: Time: 0.28069162368774414, Total Reward: 231.44071988571423, Q Loss: 116628.2197265625, Actor Loss: -18844.551391601562
Episode 4878: Time: 0.18362760543823242, Total Reward: 147.45440242210893, Q Loss: 81459.93359375, Actor Loss: -12612.888549804688
Episode 4879: Time: 0.3991973400115967, Total Reward: 332.226672685766, Q Loss: 187536.8270263672, Actor Loss: -27788.318359375

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Episode 4880: Time: 0.0974428653717041, Total Reward: 71.38610962542134, Q L
oss: 46585.04296875, Actor Loss: -6734.69873046875
Episode 4881: Time: 0.2599518299102783, Total Reward: 211.68986978226576, Q
Loss: 125113.96069335938, Actor Loss: -17991.489685058594
Episode 4882: Time: 0.5816473960876465, Total Reward: 490.3550319741526, Q L
oss: 279702.3857421875, Actor Loss: -41338.984924316406
Episode 4883: Time: 0.3239626884460449, Total Reward: 268.6431407564613, Q L
oss: 156399.49853515625, Actor Loss: -22379.289489746094
Episode 4884: Time: 0.528235912322998, Total Reward: 445.32924815527883, Q L
oss: 238530.3516845703, Actor Loss: -36750.596435546875
Episode 4885: Time: 0.32387518882751465, Total Reward: 268.67019589111857, Q
Loss: 158930.2734375, Actor Loss: -22683.10223388672
Episode 4886: Time: 0.6045360565185547, Total Reward: 510.22058136246125, Q
Loss: 280190.7188720703, Actor Loss: -42995.14880371094
Episode 4887: Time: 0.32502150535583496, Total Reward: 267.963988597775, Q L
oss: 136030.9588623047, Actor Loss: -22871.566040039062
Episode 4888: Time: 0.7009131908416748, Total Reward: 591.0569259500171, Q L
oss: 263676.9553222656, Actor Loss: -48542.791442871094
Episode 4889: Time: 0.1297922134399414, Total Reward: 100.95574562026017, Q
Loss: 47596.65869140625, Actor Loss: -9041.214172363281
Episode 4890: Time: 0.31285762786865234, Total Reward: 256.2870682152039, Q
Loss: 128535.96252441406, Actor Loss: -22061.04705810547
Episode 4891: Time: 0.0758364200592041, Total Reward: 53.777196000114735, Q
Loss: 35908.83532714844, Actor Loss: -5176.642150878906
Episode 4892: Time: 0.25919389724731445, Total Reward: 212.46419353495645, Q
Loss: 136538.96655273438, Actor Loss: -18463.337036132812
Episode 4893: Time: 0.7437572479248047, Total Reward: 629.6597780210357, Q L
oss: 387116.4239501953, Actor Loss: -52062.57745361328
Episode 4894: Time: 1.02447509765625, Total Reward: 871.3272699632123, Q Los
s: 535369.4525146484, Actor Loss: -71616.84185791016
Episode 4895: Time: 0.45301389694213867, Total Reward: 380.7429993563709, Q
Loss: 251680.93896484375, Actor Loss: -32303.307983398438
Episode 4896: Time: 0.2593648433685303, Total Reward: 210.84914328960207, Q
Loss: 156427.81005859375, Actor Loss: -18327.7724609375
Episode 4897: Time: 0.7114913463592529, Total Reward: 603.8667426400664, Q L
oss: 360902.99462890625, Actor Loss: -49963.58270263672
Episode 4898: Time: 0.11899518966674805, Total Reward: 91.28802061043417, Q
Loss: 41156.60107421875, Actor Loss: -8456.464965820312
Episode 4899: Time: 0.31357884407043457, Total Reward: 257.68607739517864, Q
Loss: 146699.18395996094, Actor Loss: -21917.456970214844
Validation Mean: 9356.119531528842, Validation Std: 0.4810361729517656
saving model
Episode 4900: Time: 0.2503671646118164, Total Reward: 203.12582308181683, Q
Loss: 123765.67224121094, Actor Loss: -17451.56591796875
Episode 4901: Time: 0.2921164035797119, Total Reward: 240.2917165201254, Q L
oss: 167215.5546875, Actor Loss: -20151.887451171875
Episode 4902: Time: 0.31368207931518555, Total Reward: 259.65835182050915, Q
Loss: 159658.43237304688, Actor Loss: -21561.56121826172
Episode 4903: Time: 0.24854254722595215, Total Reward: 200.46713570842354, Q
Loss: 115614.93127441406, Actor Loss: -17880.576049804688
Episode 4904: Time: 0.4539461135864258, Total Reward: 379.90320375352627, Q
Loss: 197704.87622070312, Actor Loss: -32157.918701171875
Episode 4905: Time: 0.22785735130310059, Total Reward: 183.11327115321717, Q
Loss: 94709.17944335938, Actor Loss: -15597.596069335938
Episode 4906: Time: 0.11903810501098633, Total Reward: 90.67739650397508, Q
Loss: 50991.47302246094, Actor Loss: -8600.83349609375
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Episode 4907: Time: 0.4536736011505127, Total Reward: 379.72863510057925, Q Loss: 217821.2918701172, Actor Loss: -31677.290283203125
Episode 4908: Time: 0.3128542900085449, Total Reward: 257.17193951403726, Q Loss: 167741.0721435547, Actor Loss: -22538.806518554688
Episode 4909: Time: 0.2159743309020996, Total Reward: 174.58542386114374, Q Loss: 130133.37719726562, Actor Loss: -15263.441711425781
Episode 4910: Time: 0.07589173316955566, Total Reward: 53.88586262339482, Q Loss: 51063.00537109375, Actor Loss: -5279.092956542969
Episode 4911: Time: 0.1839466094970703, Total Reward: 147.10652700287588, Q Loss: 93415.95336914062, Actor Loss: -12898.059936523438
Episode 4912: Time: 0.16174554824829102, Total Reward: 128.13880224571415, Q Loss: 85019.20556640625, Actor Loss: -11347.636962890625
Episode 4913: Time: 0.11923027038574219, Total Reward: 91.50690211771533, Q Loss: 46470.990966796875, Actor Loss: -8385.520874023438
Episode 4914: Time: 0.3347330093383789, Total Reward: 276.3456804078315, Q Loss: 175454.80078125, Actor Loss: -24349.506713867188
Episode 4915: Time: 0.09738898277282715, Total Reward: 72.68284482249457, Q Loss: 37009.414794921875, Actor Loss: -6777.965637207031
Episode 4916: Time: 0.11893558502197266, Total Reward: 91.0748066746819, Q Loss: 57712.029052734375, Actor Loss: -8480.5283203125
Episode 4917: Time: 0.5389246940612793, Total Reward: 454.7363529678219, Q Loss: 277495.6193847656, Actor Loss: -38932.518615722656
Episode 4918: Time: 0.2915065288543701, Total Reward: 237.75027413101805, Q Loss: 163909.9217529297, Actor Loss: -20074.699340820312
Episode 4919: Time: 0.3127613067626953, Total Reward: 258.4806346687725, Q Loss: 162611.62866210938, Actor Loss: -22784.322326660156
Episode 4920: Time: 0.11885499954223633, Total Reward: 91.48478138974676, Q Loss: 62239.652587890625, Actor Loss: -8809.234680175781
Episode 4921: Time: 0.570838451385498, Total Reward: 482.6380661016799, Q Loss: 326332.2287597656, Actor Loss: -41561.7041015625
Episode 4922: Time: 0.23755526542663574, Total Reward: 193.4752746693391, Q Loss: 133336.82080078125, Actor Loss: -16860.432067871094
Episode 4923: Time: 0.28088808059692383, Total Reward: 229.51575846127946, Q Loss: 165558.56323242188, Actor Loss: -20044.683532714844
Episode 4924: Time: 0.33484959602355957, Total Reward: 276.7120776680995, Q Loss: 188568.60961914062, Actor Loss: -24580.965454101562
Episode 4925: Time: 0.21597766876220703, Total Reward: 174.64545028513152, Q Loss: 122186.36181640625, Actor Loss: -15249.708740234375
Episode 4926: Time: 0.2595827579498291, Total Reward: 208.9379285112914, Q Loss: 162186.34826660156, Actor Loss: -18847.044860839844
Episode 4927: Time: 0.2594637870788574, Total Reward: 211.20109619679005, Q Loss: 115704.70153808594, Actor Loss: -18554.30889892578
Episode 4928: Time: 0.5392811298370361, Total Reward: 453.8822240436894, Q Loss: 308685.4621582031, Actor Loss: -38494.95001220703
Episode 4929: Time: 0.3346364498138428, Total Reward: 278.22346408776474, Q Loss: 182620.49365234375, Actor Loss: -23165.297973632812
Episode 4930: Time: 0.47581958770751953, Total Reward: 398.8486738726109, Q Loss: 244705.75048828125, Actor Loss: -34385.899841308594
Episode 4931: Time: 0.11905097961425781, Total Reward: 91.07479860396221, Q Loss: 48985.37023925781, Actor Loss: -8375.624938964844
Episode 4932: Time: 0.21609878540039062, Total Reward: 173.66488685944137, Q Loss: 105060.14794921875, Actor Loss: -15341.831481933594
Episode 4933: Time: 0.5716598033905029, Total Reward: 479.61632186541897, Q Loss: 288353.82470703125, Actor Loss: -41882.040588378906
Episode 4934: Time: 0.18343901634216309, Total Reward: 146.94159789827498, Q Loss: 114226.791015625, Actor Loss: -13264.202880859375

Episode 4935: Time: 0.10844659805297852, Total Reward: 81.78953263968452, Q Loss: 60966.773681640625, Actor Loss: -7685.5916748046875
Episode 4936: Time: 0.08649802207946777, Total Reward: 63.3815223710944, Q Loss: 55256.0400390625, Actor Loss: -6330.70166015625
Episode 4937: Time: 0.48569631576538086, Total Reward: 404.2994352377797, Q Loss: 269463.2393798828, Actor Loss: -35150.719482421875
Episode 4938: Time: 0.09766101837158203, Total Reward: 73.01806443401908, Q Loss: 38812.89343261719, Actor Loss: -6972.588073730469
Episode 4939: Time: 0.5709733963012695, Total Reward: 481.89316558212454, Q Loss: 317725.22912597656, Actor Loss: -41414.915588378906
Episode 4940: Time: 0.23747825622558594, Total Reward: 194.10881520070294, Q Loss: 115764.59326171875, Actor Loss: -16554.60516357422
Episode 4941: Time: 0.25925612449645996, Total Reward: 211.336580732299, Q Loss: 146661.4559326172, Actor Loss: -18423.03057861328
Episode 4942: Time: 0.16179704666137695, Total Reward: 127.99201864828126, Q Loss: 81732.22485351562, Actor Loss: -11534.139221191406
Episode 4943: Time: 0.19449067115783691, Total Reward: 156.2867445230253, Q Loss: 99035.96887207031, Actor Loss: -14090.298583984375
Episode 4944: Time: 0.3884105682373047, Total Reward: 323.47265195021026, Q Loss: 198392.43408203125, Actor Loss: -28055.57098388672
Episode 4945: Time: 0.25948643684387207, Total Reward: 209.84567249319102, Q Loss: 152604.361328125, Actor Loss: -19107.356872558594
Episode 4946: Time: 0.08662581443786621, Total Reward: 62.78450573222314, Q Loss: 39529.203857421875, Actor Loss: -5941.7330322265625
Episode 4947: Time: 0.23793888092041016, Total Reward: 191.95929390974626, Q Loss: 143719.20678710938, Actor Loss: -16697.74609375
Episode 4948: Time: 0.2914543151855469, Total Reward: 239.94810210840356, Q Loss: 144817.2060546875, Actor Loss: -20860.882263183594
Episode 4949: Time: 0.33461451530456543, Total Reward: 274.90078779024327, Q Loss: 169024.05444335938, Actor Loss: -24422.232788085938
Episode 4950: Time: 0.3130524158477783, Total Reward: 258.9816710281245, Q Loss: 162389.20336914062, Actor Loss: -22912.847900390625
Episode 4951: Time: 0.16216826438903809, Total Reward: 129.1345083497353, Q Loss: 93246.9716796875, Actor Loss: -11805.598815917969
Episode 4952: Time: 0.2804408073425293, Total Reward: 231.28112132674948, Q Loss: 177428.06665039062, Actor Loss: -20443.307861328125
Episode 4953: Time: 0.12958860397338867, Total Reward: 100.47259810150294, Q Loss: 59832.669921875, Actor Loss: -9312.672973632812
Episode 4954: Time: 0.2805788516998291, Total Reward: 229.62155566177995, Q Loss: 144498.41040039062, Actor Loss: -20688.146850585938
Episode 4955: Time: 0.12972116470336914, Total Reward: 100.69817764746301, Q Loss: 69570.18566894531, Actor Loss: -9283.266174316406
Episode 4956: Time: 0.44249463081359863, Total Reward: 368.7866177032848, Q Loss: 236856.6007080078, Actor Loss: -32873.40026855469
Episode 4957: Time: 0.16192197799682617, Total Reward: 129.00195546180126, Q Loss: 85338.63671875, Actor Loss: -11887.58203125
Episode 4958: Time: 0.1515941619873047, Total Reward: 119.48119147112439, Q Loss: 96056.89477539062, Actor Loss: -11264.217346191406
Episode 4959: Time: 0.31288695335388184, Total Reward: 259.1936213687982, Q Loss: 156276.67944335938, Actor Loss: -22912.634033203125
Episode 4960: Time: 0.19521689414978027, Total Reward: 156.27371025616455, Q Loss: 134686.24633789062, Actor Loss: -14134.120422363281
Episode 4961: Time: 0.2392568588256836, Total Reward: 193.60648935951738, Q Loss: 117406.67407226562, Actor Loss: -17396.226989746094
Episode 4962: Time: 0.2387561798095703, Total Reward: 193.89018875086472, Q Loss: 127869.2099609375, Actor Loss: -17483.031860351562

Episode 4963: Time: 0.4107694625854492, Total Reward: 341.72033892466015, Q Loss: 225442.92614746094, Actor Loss: -30529.594604492188
Episode 4964: Time: 0.5606448650360107, Total Reward: 470.512695060159, Q Loss: 332279.0192871094, Actor Loss: -42234.55126953125
Episode 4965: Time: 0.26992321014404297, Total Reward: 219.95526658570344, Q Loss: 138344.43322753906, Actor Loss: -19591.73699951172
Episode 4966: Time: 0.28088855743408203, Total Reward: 229.482804676124, Q Loss: 127364.30102539062, Actor Loss: -20852.076293945312
Episode 4967: Time: 0.3452436923980713, Total Reward: 286.09475672930444, Q Loss: 190431.2060546875, Actor Loss: -25476.044189453125
Episode 4968: Time: 0.23798656463623047, Total Reward: 192.1381675487547, Q Loss: 143365.68774414062, Actor Loss: -17438.04571533203
Episode 4969: Time: 0.46491527557373047, Total Reward: 389.29149811306644, Q Loss: 255460.2275390625, Actor Loss: -34741.240661621094
Episode 4970: Time: 0.3899376392364502, Total Reward: 322.4927866018447, Q Loss: 194205.62036132812, Actor Loss: -28081.781311035156
Episode 4971: Time: 0.6588983535766602, Total Reward: 554.4611978445954, Q Loss: 381281.5568847656, Actor Loss: -48830.03955078125
Episode 4972: Time: 0.10856962203979492, Total Reward: 81.9879038884484, Q Loss: 79771.33544921875, Actor Loss: -7926.3297119140625
Episode 4973: Time: 0.11949801445007324, Total Reward: 90.68007199751118, Q Loss: 56948.920166015625, Actor Loss: -8734.675109863281
Episode 4974: Time: 0.43213748931884766, Total Reward: 361.66921307132986, Q Loss: 233791.9901123047, Actor Loss: -32804.14715576172
Episode 4975: Time: 0.27005457878112793, Total Reward: 220.995122728383, Q Loss: 164939.62182617188, Actor Loss: -19533.257568359375
Episode 4976: Time: 0.11897516250610352, Total Reward: 90.88324054089252, Q Loss: 78308.44482421875, Actor Loss: -8853.855529785156
Episode 4977: Time: 0.3456249237060547, Total Reward: 284.03994794229465, Q Loss: 178995.1845703125, Actor Loss: -25889.087829589844
Episode 4978: Time: 0.636669397354126, Total Reward: 536.9826030044072, Q Loss: 351113.2703857422, Actor Loss: -47088.77380371094
Episode 4979: Time: 0.42072534561157227, Total Reward: 351.1668409473578, Q Loss: 249731.27978515625, Actor Loss: -31936.807067871094
Episode 4980: Time: 0.1621260643005371, Total Reward: 128.889611742814, Q Loss: 82367.57250976562, Actor Loss: -11919.489929199219
Episode 4981: Time: 0.35793137550354004, Total Reward: 294.9404524418586, Q Loss: 197241.95825195312, Actor Loss: -26066.700439453125
Episode 4982: Time: 0.2592508792877197, Total Reward: 212.4096737219965, Q Loss: 138263.0574951172, Actor Loss: -19388.451904296875
Episode 4983: Time: 0.09752345085144043, Total Reward: 72.4035216599609, Q Loss: 48614.071044921875, Actor Loss: -7246.109191894531
Episode 4984: Time: 0.3454618453979492, Total Reward: 286.3481651435126, Q Loss: 179787.01123046875, Actor Loss: -25375.012756347656
Episode 4985: Time: 0.14054131507873535, Total Reward: 109.80142075706017, Q Loss: 76755.2236328125, Actor Loss: -10875.783264160156
Episode 4986: Time: 0.2484455108642578, Total Reward: 202.07158941592573, Q Loss: 186382.3671875, Actor Loss: -19074.345703125
Episode 4987: Time: 0.5395801067352295, Total Reward: 451.77572482032326, Q Loss: 286433.029296875, Actor Loss: -40378.6064453125
Episode 4988: Time: 0.23765039443969727, Total Reward: 192.74960379081784, Q Loss: 138541.78955078125, Actor Loss: -17903.87615966797
Episode 4989: Time: 0.3561825752258301, Total Reward: 296.36316354529384, Q Loss: 212196.13745117188, Actor Loss: -26968.82208251953
Episode 4990: Time: 0.3673272132873535, Total Reward: 303.8997866192079, Q Loss: 215290.18920898438, Actor Loss: -27339.25225830078

Episode 4991: Time: 0.25928425788879395, Total Reward: 211.7009740820602, Q
Loss: 122612.28979492188, Actor Loss: -19910.308349609375
Episode 4992: Time: 0.15134525299072266, Total Reward: 119.3510004143182, Q
Loss: 77310.01123046875, Actor Loss: -11484.922668457031
Episode 4993: Time: 0.13037729263305664, Total Reward: 100.7102523446534, Q
Loss: 69814.12670898438, Actor Loss: -9936.265686035156
Episode 4994: Time: 0.4537036418914795, Total Reward: 379.8503635470199, Q L
oss: 227253.79028320312, Actor Loss: -33107.52941894531
Episode 4995: Time: 0.46370673179626465, Total Reward: 389.2639876994343, Q
Loss: 199189.38061523438, Actor Loss: -34322.07147216797
Episode 4996: Time: 0.29184794425964355, Total Reward: 237.10820597730165, Q
Loss: 164815.98168945312, Actor Loss: -21919.151123046875
Episode 4997: Time: 0.12965631484985352, Total Reward: 100.84026164231865, Q
Loss: 78209.87475585938, Actor Loss: -9919.344482421875
Episode 4998: Time: 0.9369945526123047, Total Reward: 799.3487841387159, Q L
oss: 570142.9729003906, Actor Loss: -70598.71667480469
Episode 4999: Time: 0.270158052444458, Total Reward: 220.02832463202887, Q L
oss: 143883.0274658203, Actor Loss: -20582.721801757812
Validation Mean: 9354.996694773297, Validation Std: 0.525610237637854
saving model
Episode 5000: Time: 0.2722902297973633, Total Reward: 221.11160529013134, Q
Loss: 154143.91149902344, Actor Loss: -20402.13818359375
Episode 5001: Time: 0.1516568660736084, Total Reward: 118.9247139266602, Q L
oss: 74252.94848632812, Actor Loss: -11165.5947265625
Episode 5002: Time: 0.42092013359069824, Total Reward: 351.95380817655905, Q
Loss: 236515.47192382812, Actor Loss: -31848.61846923828
Episode 5003: Time: 0.5511598587036133, Total Reward: 465.34189363409257, Q
Loss: 289932.58337402344, Actor Loss: -42354.06726074219
Episode 5004: Time: 0.5403885841369629, Total Reward: 454.6679166256425, Q L
oss: 273736.89208984375, Actor Loss: -40006.79016113281
Episode 5005: Time: 0.3679373264312744, Total Reward: 303.73908722169, Q Los
s: 201038.60498046875, Actor Loss: -27456.328552246094
Episode 5006: Time: 0.519402265548706, Total Reward: 435.8050217910129, Q Lo
ss: 304670.8271484375, Actor Loss: -39563.78063964844
Episode 5007: Time: 0.35748815536499023, Total Reward: 296.57346194965845, Q
Loss: 193483.90380859375, Actor Loss: -27440.50897216797
Episode 5008: Time: 0.12980198860168457, Total Reward: 100.30700201140826, Q
Loss: 78006.50610351562, Actor Loss: -10438.755798339844
Episode 5009: Time: 0.5300493240356445, Total Reward: 444.94195090988563, Q
Loss: 293900.2734375, Actor Loss: -39213.36096191406
Episode 5010: Time: 0.2386326789855957, Total Reward: 192.18646366275175, Q
Loss: 151982.84228515625, Actor Loss: -18256.758850097656
Episode 5011: Time: 0.3458824157714844, Total Reward: 286.39567181715006, Q
Loss: 195476.87817382812, Actor Loss: -26854.221069335938
Episode 5012: Time: 0.21668577194213867, Total Reward: 174.2299146576804, Q
Loss: 118783.01049804688, Actor Loss: -16273.418701171875
Episode 5013: Time: 0.4861617088317871, Total Reward: 408.36634617422703, Q
Loss: 290851.0539550781, Actor Loss: -36738.147521972656
Episode 5014: Time: 0.18382883071899414, Total Reward: 145.14873700994164, Q
Loss: 101256.06982421875, Actor Loss: -14691.948486328125
Episode 5015: Time: 0.2164628505706787, Total Reward: 175.03850795399686, Q
Loss: 160235.4765625, Actor Loss: -17015.216430664062
Episode 5016: Time: 0.45421528816223145, Total Reward: 380.18131521366087, Q
Loss: 261032.728515625, Actor Loss: -34444.94421386719
Episode 5017: Time: 0.5617971420288086, Total Reward: 473.1829586134989, Q L
oss: 323861.73291015625, Actor Loss: -43830.933349609375

Episode 5018: Time: 0.2810661792755127, Total Reward: 230.63209849937587, Q Loss: 159152.65405273438, Actor Loss: -21723.98846435547
Episode 5019: Time: 0.4215054512023926, Total Reward: 350.930449614041, Q Loss: 264159.1209716797, Actor Loss: -31863.81982421875
Episode 5020: Time: 0.2809712886810303, Total Reward: 230.68150708980582, Q Loss: 124031.84033203125, Actor Loss: -21093.446166992188
Episode 5021: Time: 0.15095925331115723, Total Reward: 116.99016480970597, Q Loss: 102639.48413085938, Actor Loss: -11859.451416015625
Episode 5022: Time: 0.46354198455810547, Total Reward: 387.750461887035, Q Loss: 299283.9377441406, Actor Loss: -35952.17645263672
Episode 5023: Time: 0.6685175895690918, Total Reward: 567.0567680059, Q Loss: 378262.73681640625, Actor Loss: -51946.24560546875
Episode 5024: Time: 0.08685898780822754, Total Reward: 63.27898093739386, Q Loss: 45910.223388671875, Actor Loss: -6855.376037597656
Episode 5025: Time: 0.2593653202056885, Total Reward: 212.53639173624532, Q Loss: 159793.16479492188, Actor Loss: -19883.75860595703
Episode 5026: Time: 0.8218224048614502, Total Reward: 694.9840988814212, Q Loss: 480824.2492675781, Actor Loss: -62953.462890625
Episode 5027: Time: 0.5717906951904297, Total Reward: 481.3573883495738, Q Loss: 419480.7102050781, Actor Loss: -44528.3310546875
Episode 5028: Time: 0.28081488609313965, Total Reward: 228.33710732816277, Q Loss: 130970.94921875, Actor Loss: -22249.950744628906
Episode 5029: Time: 0.09738564491271973, Total Reward: 72.49077301642902, Q Loss: 52552.81640625, Actor Loss: -7627.5562744140625
Episode 5030: Time: 0.22731924057006836, Total Reward: 183.62466029130326, Q Loss: 144706.63403320312, Actor Loss: -17544.280639648438
Episode 5031: Time: 0.2915327548980713, Total Reward: 238.4248590544732, Q Loss: 173171.32641601562, Actor Loss: -23058.738891601562
Episode 5032: Time: 0.108489990234375, Total Reward: 82.07322455012748, Q Loss: 61450.965087890625, Actor Loss: -8356.164306640625
Episode 5033: Time: 0.34601593017578125, Total Reward: 286.618048491759, Q Loss: 231927.3115234375, Actor Loss: -26756.082641601562
Episode 5034: Time: 0.41092848777770996, Total Reward: 342.025309886975, Q Loss: 243990.43701171875, Actor Loss: -31765.599731445312
Episode 5035: Time: 0.2385540008544922, Total Reward: 194.32212703458745, Q Loss: 139661.36657714844, Actor Loss: -18976.432250976562
Episode 5036: Time: 0.24911046028137207, Total Reward: 202.47608682392456, Q Loss: 140923.90625, Actor Loss: -19231.8515625
Episode 5037: Time: 0.32471442222595215, Total Reward: 268.13326962004436, Q Loss: 209313.13720703125, Actor Loss: -25485.240173339844
Episode 5038: Time: 0.1301136016845703, Total Reward: 100.48835711886073, Q Loss: 69439.24633789062, Actor Loss: -9898.562866210938
Episode 5039: Time: 1.0133147239685059, Total Reward: 860.9724540449962, Q Loss: 592739.5751953125, Actor Loss: -78303.27941894531
Episode 5040: Time: 0.33556151390075684, Total Reward: 277.11020642420954, Q Loss: 195903.14501953125, Actor Loss: -25532.850219726562
Episode 5041: Time: 0.25934791564941406, Total Reward: 212.08629514942217, Q Loss: 137236.30737304688, Actor Loss: -20157.101318359375
Episode 5042: Time: 0.21593713760375977, Total Reward: 174.98450280522047, Q Loss: 126733.85522460938, Actor Loss: -17079.29736328125
Episode 5043: Time: 0.09739232063293457, Total Reward: 72.31108009577841, Q Loss: 62721.17724609375, Actor Loss: -7408.617492675781
Episode 5044: Time: 0.4208030700683594, Total Reward: 351.43517343977544, Q Loss: 233730.1220703125, Actor Loss: -31981.3115234375
Episode 5045: Time: 0.22674918174743652, Total Reward: 184.86791382636903, Q Loss: 145680.92578125, Actor Loss: -17948.039428710938

Episode 5046: Time: 0.7863092422485352, Total Reward: 666.6487508636116, Q Loss: 414581.8729248047, Actor Loss: -62340.38201904297
Episode 5047: Time: 0.15104031562805176, Total Reward: 119.06727830475413, Q Loss: 96038.22680664062, Actor Loss: -12026.46826171875
Episode 5048: Time: 0.18409466743469238, Total Reward: 146.80180639153463, Q Loss: 130072.60498046875, Actor Loss: -14100.866638183594
Episode 5049: Time: 0.25913381576538086, Total Reward: 212.67042586651127, Q Loss: 142192.990234375, Actor Loss: -20161.07177734375
Episode 5050: Time: 0.4527895450592041, Total Reward: 378.42657057418995, Q Loss: 272993.01953125, Actor Loss: -35342.412109375
Episode 5051: Time: 0.5068089962005615, Total Reward: 425.77653260531474, Q Loss: 271477.57275390625, Actor Loss: -40349.64807128906
Episode 5052: Time: 0.19495105743408203, Total Reward: 155.8785303867112, Q Loss: 111084.95581054688, Actor Loss: -14854.753540039062
Episode 5053: Time: 0.7222568988800049, Total Reward: 611.6384512150213, Q Loss: 415703.6730957031, Actor Loss: -58232.304443359375
Episode 5054: Time: 0.2918703556060791, Total Reward: 240.2968590773262, Q Loss: 173629.33666992188, Actor Loss: -22336.388122558594
Episode 5055: Time: 0.15122652053833008, Total Reward: 119.0183568346151, Q Loss: 83752.30541992188, Actor Loss: -11934.631591796875
Episode 5056: Time: 0.6477105617523193, Total Reward: 546.5168383334513, Q Loss: 342656.8757324219, Actor Loss: -51204.485595703125
Episode 5057: Time: 0.16218996047973633, Total Reward: 128.8389472023769, Q Loss: 83188.759765625, Actor Loss: -12755.470947265625
Episode 5058: Time: 1.0886781215667725, Total Reward: 929.5389952175847, Q Loss: 672477.9987792969, Actor Loss: -86463.90997314453
Episode 5059: Time: 0.4530935287475586, Total Reward: 378.3395481173846, Q Loss: 311308.49572753906, Actor Loss: -35193.131408691406
Episode 5060: Time: 0.2807645797729492, Total Reward: 230.32362747500363, Q Loss: 196066.453125, Actor Loss: -22909.552490234375
Episode 5061: Time: 0.34616780281066895, Total Reward: 286.67854043588517, Q Loss: 187362.54418945312, Actor Loss: -27657.99639892578
Episode 5062: Time: 0.7448713779449463, Total Reward: 627.7826429391895, Q Loss: 440320.3603515625, Actor Loss: -59207.99053955078
Episode 5063: Time: 0.19468998908996582, Total Reward: 154.26040937471348, Q Loss: 96340.03198242188, Actor Loss: -15608.726196289062
Episode 5064: Time: 0.5395574569702148, Total Reward: 451.2711729697019, Q Loss: 372365.0290527344, Actor Loss: -42289.97326660156
Episode 5065: Time: 0.7996900081634521, Total Reward: 676.2758431785269, Q Loss: 467304.8312988281, Actor Loss: -64631.46923828125
Episode 5066: Time: 0.10840034484863281, Total Reward: 81.88265502082916, Q Loss: 77011.37182617188, Actor Loss: -8983.032836914062
Episode 5067: Time: 0.0976109504699707, Total Reward: 72.45943422572425, Q Loss: 49580.982177734375, Actor Loss: -7569.069396972656
Episode 5068: Time: 0.6803040504455566, Total Reward: 575.1384391075517, Q Loss: 466895.9599609375, Actor Loss: -55280.110900878906
Episode 5069: Time: 0.14060258865356445, Total Reward: 109.85865159335988, Q Loss: 73535.56396484375, Actor Loss: -11308.653442382812
Episode 5070: Time: 0.5066723823547363, Total Reward: 426.70207120304406, Q Loss: 327433.5252685547, Actor Loss: -41311.75891113281
Episode 5071: Time: 0.24828648567199707, Total Reward: 202.63273768779248, Q Loss: 142820.66796875, Actor Loss: -20693.793579101562
Episode 5072: Time: 0.19398856163024902, Total Reward: 154.08500813010704, Q Loss: 147049.98583984375, Actor Loss: -15647.144653320312
Episode 5073: Time: 0.8510539531707764, Total Reward: 723.459281631044, Q Loss: 568593.9233398438, Actor Loss: -68955.74688720703

Episode 5074: Time: 0.21615839004516602, Total Reward: 174.97847334357945, Q Loss: 133293.56884765625, Actor Loss: -17713.431640625
Episode 5075: Time: 0.3451981544494629, Total Reward: 286.89888860374055, Q Loss: 185199.87426757812, Actor Loss: -28347.537719726562
Episode 5076: Time: 0.5500726699829102, Total Reward: 463.7179967847233, Q Loss: 362094.44091796875, Actor Loss: -45713.81085205078
Episode 5077: Time: 0.5172584056854248, Total Reward: 437.04326465960435, Q Loss: 339715.21630859375, Actor Loss: -41817.26776123047
Episode 5078: Time: 1.056741714477539, Total Reward: 898.5673850102492, Q Loss: 673932.3826904297, Actor Loss: -85617.51440429688
Episode 5079: Time: 0.23770952224731445, Total Reward: 193.2188108458273, Q Loss: 148104.95263671875, Actor Loss: -18865.46502685547
Episode 5080: Time: 0.08659529685974121, Total Reward: 62.74738289553723, Q Loss: 70393.34033203125, Actor Loss: -7092.609191894531
Episode 5081: Time: 0.36708950996398926, Total Reward: 305.83060383087144, Q Loss: 238505.22717285156, Actor Loss: -30308.25323486328
Episode 5082: Time: 0.31327199935913086, Total Reward: 258.51850012255125, Q Loss: 196465.89721679688, Actor Loss: -25221.40838623047
Episode 5083: Time: 0.2816462516784668, Total Reward: 228.78265729519828, Q Loss: 214951.8212890625, Actor Loss: -22789.77655029297
Episode 5084: Time: 0.5932183265686035, Total Reward: 500.4226690735774, Q Loss: 367756.92028808594, Actor Loss: -48313.510009765625
Episode 5085: Time: 0.1296687126159668, Total Reward: 100.74600176974793, Q Loss: 95437.4150390625, Actor Loss: -10167.105224609375
Episode 5086: Time: 0.13041448593139648, Total Reward: 100.42101952491214, Q Loss: 75544.79809570312, Actor Loss: -10431.367309570312
Episode 5087: Time: 0.30269551277160645, Total Reward: 247.98777038144618, Q Loss: 228288.21850585938, Actor Loss: -24066.266052246094
Episode 5088: Time: 0.09774613380432129, Total Reward: 72.35145752438191, Q Loss: 62065.16015625, Actor Loss: -8237.32958984375
Episode 5089: Time: 0.11935257911682129, Total Reward: 91.50937057741389, Q Loss: 76936.26611328125, Actor Loss: -9256.939147949219
Episode 5090: Time: 0.24881291389465332, Total Reward: 200.6679413502098, Q Loss: 138091.64477539062, Actor Loss: -19496.20184326172
Episode 5091: Time: 0.3357086181640625, Total Reward: 276.8080506510284, Q Loss: 219537.86450195312, Actor Loss: -26793.786010742188
Episode 5092: Time: 0.1839749813079834, Total Reward: 147.53048266529768, Q Loss: 113712.68041992188, Actor Loss: -14955.107849121094
Episode 5093: Time: 0.48696303367614746, Total Reward: 408.2186971737969, Q Loss: 291774.8181152344, Actor Loss: -38672.3193359375
Episode 5094: Time: 0.40053653717041016, Total Reward: 332.8651713058553, Q Loss: 284339.85546875, Actor Loss: -33521.041259765625
Episode 5095: Time: 0.2813606262207031, Total Reward: 230.1850069624854, Q Loss: 227235.416015625, Actor Loss: -23571.628967285156
Episode 5096: Time: 0.20617318153381348, Total Reward: 166.4966793953123, Q Loss: 154963.05810546875, Actor Loss: -16019.113159179688
Episode 5097: Time: 0.3249843120574951, Total Reward: 267.60333807107594, Q Loss: 200336.16845703125, Actor Loss: -26728.565551757812
Episode 5098: Time: 0.21685123443603516, Total Reward: 172.98170708214224, Q Loss: 162584.12231445312, Actor Loss: -17509.791625976562
Episode 5099: Time: 0.3354921340942383, Total Reward: 276.2059429720631, Q Loss: 236270.29809570312, Actor Loss: -27917.369506835938
Validation Mean: 9355.477485141188, Validation Std: 0.5610351729228791
saving model
Episode 5100: Time: 0.359785795211792, Total Reward: 295.4101758421178, Q Loss: 220994.22314453125, Actor Loss: -29790.829956054688

Episode 5101: Time: 0.41153717041015625, Total Reward: 340.8297311781389, Q Loss: 255964.71643066406, Actor Loss: -33628.073303222656
Episode 5102: Time: 0.45461082458496094, Total Reward: 380.0497736473762, Q Loss: 307224.7390136719, Actor Loss: -37369.061584472656
Episode 5103: Time: 0.3903381824493408, Total Reward: 321.33530688478925, Q Loss: 247472.39331054688, Actor Loss: -31651.877685546875
Episode 5104: Time: 0.5849418640136719, Total Reward: 489.5370697030616, Q Loss: 380538.72399902344, Actor Loss: -48247.15399169922
Episode 5105: Time: 0.43297553062438965, Total Reward: 360.4962621516194, Q Loss: 308461.703125, Actor Loss: -36497.072021484375
Episode 5106: Time: 0.24949908256530762, Total Reward: 202.89374947003563, Q Loss: 180824.85620117188, Actor Loss: -20463.746337890625
Episode 5107: Time: 0.35660648345947266, Total Reward: 294.8265020814484, Q Loss: 238362.7022705078, Actor Loss: -29953.90948486328
Episode 5108: Time: 0.33533716201782227, Total Reward: 277.3355908812636, Q Loss: 221505.05322265625, Actor Loss: -28310.97509765625
Episode 5109: Time: 0.2818272113800049, Total Reward: 229.7716595651119, Q Loss: 180220.38427734375, Actor Loss: -23438.11248779297
Episode 5110: Time: 0.5516090393066406, Total Reward: 463.3251119901037, Q Loss: 325379.8485107422, Actor Loss: -44907.3525390625
Episode 5111: Time: 0.2064669132232666, Total Reward: 165.43692267098743, Q Loss: 116322.40234375, Actor Loss: -16870.36407470703
Episode 5112: Time: 0.18400073051452637, Total Reward: 147.00579864482168, Q Loss: 106711.9033203125, Actor Loss: -15987.054748535156
Episode 5113: Time: 0.18419504165649414, Total Reward: 147.7482980984201, Q Loss: 102722.33203125, Actor Loss: -15398.717712402344
Episode 5114: Time: 0.20620131492614746, Total Reward: 165.6670447571912, Q Loss: 140508.77294921875, Actor Loss: -16721.321166992188
Episode 5115: Time: 0.314117431640625, Total Reward: 258.8203959749891, Q Loss: 227118.35791015625, Actor Loss: -26543.89764404297
Episode 5116: Time: 0.33601808547973633, Total Reward: 277.45070948257774, Q Loss: 227343.541015625, Actor Loss: -28141.888793945312
Episode 5117: Time: 0.34704017639160156, Total Reward: 285.15953067716225, Q Loss: 233488.0224609375, Actor Loss: -29273.97900390625
Episode 5118: Time: 0.16229248046875, Total Reward: 128.74121425093915, Q Loss: 114904.75805664062, Actor Loss: -12958.562316894531
Episode 5119: Time: 0.15159869194030762, Total Reward: 117.44896840517298, Q Loss: 124060.4912109375, Actor Loss: -12662.232543945312
Episode 5120: Time: 0.28168749809265137, Total Reward: 230.040157290735, Q Loss: 177629.6746826172, Actor Loss: -23230.45489501953
Episode 5121: Time: 0.30303287506103516, Total Reward: 249.63911966772156, Q Loss: 208834.34057617188, Actor Loss: -25823.122497558594
Episode 5122: Time: 0.3683004379272461, Total Reward: 305.0209051962028, Q Loss: 206230.90625, Actor Loss: -29499.019775390625
Episode 5123: Time: 0.2383408546447754, Total Reward: 193.6438238280611, Q Loss: 152120.90063476562, Actor Loss: -20074.64666748047
Episode 5124: Time: 0.3355894088745117, Total Reward: 277.0176512983967, Q Loss: 243081.6005859375, Actor Loss: -28199.497497558594
Episode 5125: Time: 0.7017335891723633, Total Reward: 594.375159131712, Q Loss: 508783.58349609375, Actor Loss: -58353.518005371094
Episode 5126: Time: 0.4105978012084961, Total Reward: 342.94757699348236, Q Loss: 306858.7365722656, Actor Loss: -34329.1689453125
Episode 5127: Time: 0.47574281692504883, Total Reward: 394.9121693267345, Q Loss: 407155.3752441406, Actor Loss: -40443.806396484375
Episode 5128: Time: 0.15182685852050781, Total Reward: 119.44550445090692, Q Loss: 114496.36157226562, Actor Loss: -12884.59423828125

Episode 5129: Time: 0.17393803596496582, Total Reward: 136.20770843179645, Q Loss: 127635.93212890625, Actor Loss: -14793.295043945312
Episode 5130: Time: 0.1632077693939209, Total Reward: 128.8013151268965, Q Loss: 117249.32958984375, Actor Loss: -13767.44140625
Episode 5131: Time: 0.21714544296264648, Total Reward: 174.01654308148537, Q Loss: 150973.607421875, Actor Loss: -18367.405822753906
Episode 5132: Time: 0.249314546585083, Total Reward: 203.64311745682198, Q Loss: 160883.50634765625, Actor Loss: -21674.7431640625
Episode 5133: Time: 0.17330551147460938, Total Reward: 137.39013644906575, Q Loss: 114247.71337890625, Actor Loss: -13765.094970703125
Episode 5134: Time: 0.2815744876861572, Total Reward: 231.2410630921322, Q Loss: 189679.47485351562, Actor Loss: -23445.145141601562
Episode 5135: Time: 0.259920597076416, Total Reward: 212.2874991576097, Q Loss: 158914.82299804688, Actor Loss: -21648.060485839844
Episode 5136: Time: 0.27088379859924316, Total Reward: 221.0206466464541, Q Loss: 175697.23657226562, Actor Loss: -23058.006103515625
Episode 5137: Time: 0.6374521255493164, Total Reward: 538.3974378845592, Q Loss: 465416.84033203125, Actor Loss: -53294.89270019531
Episode 5138: Time: 0.29201555252075195, Total Reward: 240.62108399044985, Q Loss: 162339.90234375, Actor Loss: -24534.788635253906
Episode 5139: Time: 0.4004535675048828, Total Reward: 330.38258679569105, Q Loss: 310425.6848144531, Actor Loss: -33902.5732421875
Episode 5140: Time: 0.07596111297607422, Total Reward: 53.34038711101519, Q Loss: 57208.7392578125, Actor Loss: -6325.460754394531
Episode 5141: Time: 0.18422770500183105, Total Reward: 146.72450428799533, Q Loss: 162213.7978515625, Actor Loss: -15384.811706542969
Episode 5142: Time: 0.49774813652038574, Total Reward: 415.91988731128004, Q Loss: 356663.78662109375, Actor Loss: -41787.83319091797
Episode 5143: Time: 0.5941603183746338, Total Reward: 500.1542604448559, Q Loss: 389969.3732910156, Actor Loss: -50686.313903808594
Episode 5144: Time: 0.4645094871520996, Total Reward: 389.55517251536946, Q Loss: 356544.41455078125, Actor Loss: -40105.60339355469
Episode 5145: Time: 0.7566039562225342, Total Reward: 638.9581514260933, Q Loss: 585838.52734375, Actor Loss: -66233.55548095703
Episode 5146: Time: 0.22767138481140137, Total Reward: 183.16015079762965, Q Loss: 166787.6279296875, Actor Loss: -19304.101135253906
Episode 5147: Time: 0.09758925437927246, Total Reward: 71.16631892057869, Q Loss: 70616.63671875, Actor Loss: -8206.700073242188
Episode 5148: Time: 0.8968551158905029, Total Reward: 759.9930467029641, Q Loss: 648947.1875, Actor Loss: -76915.35668945312
Episode 5149: Time: 0.5732283592224121, Total Reward: 482.02490037183793, Q Loss: 385369.4040527344, Actor Loss: -49431.1884765625
Episode 5150: Time: 0.23839354515075684, Total Reward: 194.14100308176353, Q Loss: 177529.8271484375, Actor Loss: -20225.296752929688
Episode 5151: Time: 0.3898162841796875, Total Reward: 324.4268106575167, Q Loss: 269933.0910644531, Actor Loss: -33284.01983642578
Episode 5152: Time: 0.43247556686401367, Total Reward: 360.95865531306566, Q Loss: 323228.0135498047, Actor Loss: -37538.92608642578
Episode 5153: Time: 0.7998740673065186, Total Reward: 678.7808947176635, Q Loss: 586231.7392578125, Actor Loss: -69537.92657470703
Episode 5154: Time: 0.33616042137145996, Total Reward: 276.047496654392, Q Loss: 235839.8232421875, Actor Loss: -28819.777587890625
Episode 5155: Time: 0.8219373226165771, Total Reward: 695.8949366283261, Q Loss: 589115.4750976562, Actor Loss: -70117.07568359375
Episode 5156: Time: 0.4860880374908447, Total Reward: 407.05954692080604, Q Loss: 389279.09521484375, Actor Loss: -42210.489013671875

Episode 5157: Time: 0.14068078994750977, Total Reward: 110.07254156301592, Q Loss: 98217.876953125, Actor Loss: -12047.160522460938
Episode 5158: Time: 0.4210381507873535, Total Reward: 352.40716257494535, Q Loss: 315678.0036621094, Actor Loss: -35785.267517089844
Episode 5159: Time: 0.21631526947021484, Total Reward: 175.14183955868006, Q Loss: 144702.01196289062, Actor Loss: -18620.94171142578
Episode 5160: Time: 0.6797115802764893, Total Reward: 576.145127764408, Q Loss: 474180.7795410156, Actor Loss: -58907.808349609375
Episode 5161: Time: 0.46514296531677246, Total Reward: 389.38037623813983, Q Loss: 462889.31591796875, Actor Loss: -40573.92907714844
Episode 5162: Time: 0.31369519233703613, Total Reward: 257.4519969230127, Q Loss: 244836.79077148438, Actor Loss: -27027.074951171875
Episode 5163: Time: 0.3028233051300049, Total Reward: 249.13651638795776, Q Loss: 206546.3896484375, Actor Loss: -25782.297241210938
Episode 5164: Time: 0.12987089157104492, Total Reward: 100.85171298849083, Q Loss: 94987.44091796875, Actor Loss: -10819.836975097656
Episode 5165: Time: 0.3136320114135742, Total Reward: 258.3991115647511, Q Loss: 257761.13940429688, Actor Loss: -26800.10174560547
Episode 5166: Time: 0.11902999877929688, Total Reward: 91.68421194205288, Q Loss: 104908.64990234375, Actor Loss: -10406.153564453125
Episode 5167: Time: 0.21662425994873047, Total Reward: 175.32559133110755, Q Loss: 154520.76684570312, Actor Loss: -18263.65557861328
Episode 5168: Time: 0.1513361930847168, Total Reward: 119.23341992569827, Q Loss: 107175.01806640625, Actor Loss: -13620.106140136719
Episode 5169: Time: 0.3678929805755615, Total Reward: 302.4433060453204, Q Loss: 267699.66052246094, Actor Loss: -32867.99676513672
Episode 5170: Time: 0.46543264389038086, Total Reward: 387.98274150315956, Q Loss: 350473.5712890625, Actor Loss: -40876.37744140625
Episode 5171: Time: 0.29363489151000977, Total Reward: 240.93959453884872, Q Loss: 249327.49584960938, Actor Loss: -25958.318420410156
Episode 5172: Time: 0.1843550205230713, Total Reward: 146.31536974659411, Q Loss: 131679.87744140625, Actor Loss: -16436.059692382812
Episode 5173: Time: 0.3252701759338379, Total Reward: 266.1605615290614, Q Loss: 198829.18188476562, Actor Loss: -28126.306518554688
Episode 5174: Time: 0.4435136318206787, Total Reward: 371.3708544810601, Q Loss: 367494.58544921875, Actor Loss: -38647.61608886719
Episode 5175: Time: 0.22710084915161133, Total Reward: 184.3262171277761, Q Loss: 195995.31665039062, Actor Loss: -20398.633178710938
Episode 5176: Time: 0.18390464782714844, Total Reward: 147.48751290785628, Q Loss: 119558.7763671875, Actor Loss: -16186.575866699219
Episode 5177: Time: 0.21665358543395996, Total Reward: 173.89802479369968, Q Loss: 153216.31420898438, Actor Loss: -19212.143005371094
Episode 5178: Time: 0.7984342575073242, Total Reward: 676.1616260849635, Q Loss: 568444.0607910156, Actor Loss: -70700.87042236328
Episode 5179: Time: 0.1191256046295166, Total Reward: 91.17615686872693, Q Loss: 68866.55322265625, Actor Loss: -10135.263793945312
Episode 5180: Time: 0.17338991165161133, Total Reward: 138.3059620634599, Q Loss: 122815.80004882812, Actor Loss: -14709.638488769531
Episode 5181: Time: 0.6383466720581055, Total Reward: 537.311150403344, Q Loss: 557182.390625, Actor Loss: -56894.94647216797
Episode 5182: Time: 0.5732936859130859, Total Reward: 481.9800594905407, Q Loss: 437300.56298828125, Actor Loss: -49666.613342285156
Episode 5183: Time: 0.24861812591552734, Total Reward: 202.85161024392795, Q Loss: 204490.24609375, Actor Loss: -21532.6220703125
Episode 5184: Time: 0.31359148025512695, Total Reward: 257.7449350641894, Q Loss: 233475.46704101562, Actor Loss: -27435.732971191406

Episode 5185: Time: 0.09774065017700195, Total Reward: 72.84071754404323, Q Loss: 98157.11962890625, Actor Loss: -8941.138305664062
Episode 5186: Time: 0.30290913581848145, Total Reward: 249.73797400806149, Q Loss: 261185.3720703125, Actor Loss: -26248.593688964844
Episode 5187: Time: 0.16214942932128906, Total Reward: 129.04393102836593, Q Loss: 122930.07507324219, Actor Loss: -14323.314758300781
Episode 5188: Time: 0.37802577018737793, Total Reward: 313.18492657308144, Q Loss: 276514.5234375, Actor Loss: -33098.558837890625
Episode 5189: Time: 0.2703413963317871, Total Reward: 219.76692783946132, Q Loss: 190735.71533203125, Actor Loss: -24096.82989501953
Episode 5190: Time: 0.15150094032287598, Total Reward: 119.27642805172836, Q Loss: 104987.0625, Actor Loss: -13327.711975097656
Episode 5191: Time: 0.19478464126586914, Total Reward: 155.50106761039768, Q Loss: 149317.12719726562, Actor Loss: -17112.654846191406
Episode 5192: Time: 0.389096736907959, Total Reward: 323.07131763425, Q Loss: 294603.38330078125, Actor Loss: -34429.775390625
Episode 5193: Time: 0.14051270484924316, Total Reward: 109.78063896160725, Q Loss: 109715.15893554688, Actor Loss: -12504.216674804688
Episode 5194: Time: 0.16248750686645508, Total Reward: 128.09373825091524, Q Loss: 128366.06616210938, Actor Loss: -14888.525451660156
Episode 5195: Time: 0.335172176361084, Total Reward: 277.39899317019297, Q Loss: 238118.728515625, Actor Loss: -29755.906616210938
Episode 5196: Time: 0.3995816707611084, Total Reward: 334.6165420972078, Q Loss: 311828.16943359375, Actor Loss: -34911.31481933594
Episode 5197: Time: 0.27081847190856934, Total Reward: 220.98314808010053, Q Loss: 205725.15112304688, Actor Loss: -23679.90283203125
Episode 5198: Time: 0.30321288108825684, Total Reward: 249.79895009423768, Q Loss: 299703.3063964844, Actor Loss: -27786.03204345703
Episode 5199: Time: 0.2928166389465332, Total Reward: 239.14630363504014, Q Loss: 264961.6633300781, Actor Loss: -27166.591552734375
Validation Mean: 9355.461213364542, Validation Std: 0.7194796694630038
saving model
Episode 5200: Time: 0.6293461322784424, Total Reward: 526.9035819125569, Q Loss: 450801.86572265625, Actor Loss: -55146.68328857422
Episode 5201: Time: 0.18430233001708984, Total Reward: 146.50808540459965, Q Loss: 171779.255859375, Actor Loss: -16244.088806152344
Episode 5202: Time: 0.6159977912902832, Total Reward: 518.0763916554093, Q Loss: 534169.2071533203, Actor Loss: -54218.637145996094
Episode 5203: Time: 0.3566884994506836, Total Reward: 292.65504909683114, Q Loss: 289541.40576171875, Actor Loss: -32209.346923828125
Episode 5204: Time: 0.37806081771850586, Total Reward: 314.62041578978216, Q Loss: 361573.1318359375, Actor Loss: -32742.35028076172
Episode 5205: Time: 0.3670053482055664, Total Reward: 305.736453486002, Q Loss: 305311.2578125, Actor Loss: -33138.2802734375
Episode 5206: Time: 0.3245508670806885, Total Reward: 266.93611048901874, Q Loss: 266495.9147949219, Actor Loss: -29329.58935546875
Episode 5207: Time: 0.12985897064208984, Total Reward: 100.83335450043096, Q Loss: 99930.9658203125, Actor Loss: -11672.045532226562
Episode 5208: Time: 0.31351232528686523, Total Reward: 258.56800444603044, Q Loss: 259389.11206054688, Actor Loss: -28487.236938476562
Episode 5209: Time: 0.20519614219665527, Total Reward: 165.6393106892985, Q Loss: 146150.70678710938, Actor Loss: -18542.442749023438
Episode 5210: Time: 0.2270040512084961, Total Reward: 182.57753316057787, Q Loss: 183323.111328125, Actor Loss: -20206.735229492188
Episode 5211: Time: 0.7656524181365967, Total Reward: 649.8386965409805, Q Loss: 663198.5402832031, Actor Loss: -69247.28918457031

Episode 5212: Time: 0.19396257400512695, Total Reward: 155.91567435850328, Q Loss: 127118.08618164062, Actor Loss: -18242.055725097656
Episode 5213: Time: 0.41013503074645996, Total Reward: 343.32964652429587, Q Loss: 366430.8459472656, Actor Loss: -36184.53991699219
Episode 5214: Time: 0.37752747535705566, Total Reward: 314.306802862716, Q Loss: 279808.7302246094, Actor Loss: -33160.01708984375
Episode 5215: Time: 0.4534127712249756, Total Reward: 379.4426694600917, Q Loss: 305804.6960449219, Actor Loss: -40860.75646972656
Episode 5216: Time: 0.42133498191833496, Total Reward: 351.66622533985316, Q Loss: 308431.3649902344, Actor Loss: -38746.697326660156
Episode 5217: Time: 0.2490692138671875, Total Reward: 203.74177751883687, Q Loss: 196776.28369140625, Actor Loss: -22556.242248535156
Episode 5218: Time: 0.1835939884185791, Total Reward: 147.74147520709315, Q Loss: 115937.18896484375, Actor Loss: -16096.761535644531
Episode 5219: Time: 0.17318129539489746, Total Reward: 138.20082760208717, Q Loss: 126354.93774414062, Actor Loss: -15554.650695800781
Episode 5220: Time: 0.43201398849487305, Total Reward: 361.4048726627559, Q Loss: 352964.0334472656, Actor Loss: -38806.99658203125
Episode 5221: Time: 0.18352675437927246, Total Reward: 147.82199483180642, Q Loss: 157651.88793945312, Actor Loss: -16793.054077148438
Episode 5222: Time: 0.17333149909973145, Total Reward: 137.9224499104569, Q Loss: 109069.31518554688, Actor Loss: -15738.607849121094
Episode 5223: Time: 0.13000082969665527, Total Reward: 101.02309898240969, Q Loss: 82592.82666015625, Actor Loss: -12128.462341308594
Episode 5224: Time: 0.280895471572876, Total Reward: 230.29842315628366, Q Loss: 186078.25024414062, Actor Loss: -25256.782958984375
Episode 5225: Time: 0.3244285583496094, Total Reward: 268.0668591066503, Q Loss: 234391.6630859375, Actor Loss: -30499.03564453125
Episode 5226: Time: 0.42131829261779785, Total Reward: 351.27758934136784, Q Loss: 276094.66455078125, Actor Loss: -37678.74627685547
Episode 5227: Time: 0.4423203468322754, Total Reward: 370.3232709507141, Q Loss: 322759.7634277344, Actor Loss: -40576.80310058594
Episode 5228: Time: 0.38817834854125977, Total Reward: 323.9214827725626, Q Loss: 340357.4715576172, Actor Loss: -35754.06103515625
Episode 5229: Time: 0.3246026039123535, Total Reward: 267.23553254696145, Q Loss: 265673.94873046875, Actor Loss: -29405.34405517578
Episode 5230: Time: 0.3239927291870117, Total Reward: 266.11444069124946, Q Loss: 256557.96020507812, Actor Loss: -29238.233337402344
Episode 5231: Time: 0.24866056442260742, Total Reward: 200.7129689686149, Q Loss: 219827.39404296875, Actor Loss: -22622.23486328125
Episode 5232: Time: 0.40006232261657715, Total Reward: 333.68937061967296, Q Loss: 311404.4645996094, Actor Loss: -36448.021545410156
Episode 5233: Time: 0.303006649017334, Total Reward: 246.27743366932512, Q Loss: 252981.55981445312, Actor Loss: -26898.849365234375
Episode 5234: Time: 0.39962172508239746, Total Reward: 331.92409874362227, Q Loss: 369103.423828125, Actor Loss: -36448.299560546875
Episode 5235: Time: 0.16292619705200195, Total Reward: 126.16982504817591, Q Loss: 132340.14965820312, Actor Loss: -14232.487670898438
Episode 5236: Time: 0.20651030540466309, Total Reward: 165.3497227314336, Q Loss: 168806.7626953125, Actor Loss: -18927.40899658203
Episode 5237: Time: 0.22773289680480957, Total Reward: 184.94473929404467, Q Loss: 210034.52099609375, Actor Loss: -21136.746215820312
Episode 5238: Time: 0.36738014221191406, Total Reward: 305.48509032830617, Q Loss: 299066.2092285156, Actor Loss: -32976.122985839844
Episode 5239: Time: 0.17305946350097656, Total Reward: 138.17437815631374, Q Loss: 159148.30395507812, Actor Loss: -15651.767822265625

Episode 5240: Time: 0.6599669456481934, Total Reward: 556.9808868913943, Q Loss: 600885.2465820312, Actor Loss: -60609.8388671875
Episode 5241: Time: 0.5082414150238037, Total Reward: 426.6945849161066, Q Loss: 429858.84521484375, Actor Loss: -46240.497619628906
Episode 5242: Time: 0.5180463790893555, Total Reward: 435.946532974181, Q Loss: 431433.6408691406, Actor Loss: -47632.65930175781
Episode 5243: Time: 0.32383203506469727, Total Reward: 268.1832824233511, Q Loss: 242476.4658203125, Actor Loss: -29825.646118164062
Episode 5244: Time: 0.14043021202087402, Total Reward: 109.52227266435848, Q Loss: 118518.47802734375, Actor Loss: -12607.204772949219
Episode 5245: Time: 0.49855542182922363, Total Reward: 417.5248459459454, Q Loss: 430980.5998535156, Actor Loss: -45086.134216308594
Episode 5246: Time: 0.3032054901123047, Total Reward: 248.57120962162423, Q Loss: 267533.75048828125, Actor Loss: -29134.935791015625
Episode 5247: Time: 0.36742663383483887, Total Reward: 304.1954987041974, Q Loss: 337439.6257324219, Actor Loss: -34561.66003417969
Episode 5248: Time: 0.14052295684814453, Total Reward: 109.96029817480826, Q Loss: 124602.533203125, Actor Loss: -12922.865356445312
Episode 5249: Time: 0.37845516204833984, Total Reward: 313.7533031089149, Q Loss: 265285.69384765625, Actor Loss: -35111.783447265625
Episode 5250: Time: 0.16225504875183105, Total Reward: 128.3078670506308, Q Loss: 132880.86254882812, Actor Loss: -15431.200256347656
Episode 5251: Time: 0.24919962882995605, Total Reward: 201.14497112129496, Q Loss: 214917.10278320312, Actor Loss: -22745.775512695312
Episode 5252: Time: 0.5730798244476318, Total Reward: 481.6274649069221, Q Loss: 428499.2326660156, Actor Loss: -53404.7734375
Episode 5253: Time: 0.15148544311523438, Total Reward: 118.99372359556357, Q Loss: 126915.45239257812, Actor Loss: -14120.163208007812
Episode 5254: Time: 0.22719573974609375, Total Reward: 183.07909973025733, Q Loss: 159605.75854492188, Actor Loss: -21234.699096679688
Episode 5255: Time: 0.31330275535583496, Total Reward: 257.6537535362181, Q Loss: 243542.55004882812, Actor Loss: -28778.619201660156
Episode 5256: Time: 0.08675980567932129, Total Reward: 62.65780721690626, Q Loss: 62556.23828125, Actor Loss: -8085.386657714844
Episode 5257: Time: 0.18409991264343262, Total Reward: 146.86248505682445, Q Loss: 140429.30493164062, Actor Loss: -17242.554443359375
Episode 5258: Time: 0.1511974334716797, Total Reward: 119.47014814284663, Q Loss: 116639.05517578125, Actor Loss: -14136.251708984375
Episode 5259: Time: 0.14080286026000977, Total Reward: 109.74127568053139, Q Loss: 139734.95629882812, Actor Loss: -13310.493591308594
Episode 5260: Time: 0.5286102294921875, Total Reward: 444.8658649569936, Q Loss: 484025.5017089844, Actor Loss: -49109.833557128906
Episode 5261: Time: 0.47483229637145996, Total Reward: 397.30094715573443, Q Loss: 363799.69873046875, Actor Loss: -43517.07550048828
Episode 5262: Time: 0.38845396041870117, Total Reward: 323.8412096840174, Q Loss: 373147.3986816406, Actor Loss: -36154.28088378906
Episode 5263: Time: 1.0562999248504639, Total Reward: 900.0412945980828, Q Loss: 986896.2966308594, Actor Loss: -97855.30297851562
Episode 5264: Time: 0.1297602653503418, Total Reward: 100.86939575986933, Q Loss: 132447.31469726562, Actor Loss: -11875.714599609375
Episode 5265: Time: 0.5396788120269775, Total Reward: 453.86325604561983, Q Loss: 546781.4694824219, Actor Loss: -50009.229919433594
Episode 5266: Time: 0.2593502998352051, Total Reward: 212.21765875312374, Q Loss: 233093.80126953125, Actor Loss: -24250.546020507812
Episode 5267: Time: 0.15126752853393555, Total Reward: 118.99607042785395, Q Loss: 121796.0263671875, Actor Loss: -14416.552978515625

Episode 5268: Time: 0.2915661334991455, Total Reward: 239.141783607831, Q Loss: 235703.91235351562, Actor Loss: -26709.684997558594
Episode 5269: Time: 0.6691231727600098, Total Reward: 567.0438323739797, Q Loss: 608873.8410644531, Actor Loss: -62848.296630859375
Episode 5270: Time: 0.24860596656799316, Total Reward: 201.39501591170114, Q Loss: 208932.47265625, Actor Loss: -23276.327026367188
Episode 5271: Time: 0.3134479522705078, Total Reward: 258.15326598591423, Q Loss: 277909.1032714844, Actor Loss: -28924.045043945312
Episode 5272: Time: 0.46369504928588867, Total Reward: 387.87597246494795, Q Loss: 355924.1027832031, Actor Loss: -44316.67108154297
Episode 5273: Time: 0.25936269760131836, Total Reward: 210.02373502362937, Q Loss: 242164.1328125, Actor Loss: -25119.06658935547
Episode 5274: Time: 0.16211366653442383, Total Reward: 128.41569854843772, Q Loss: 126886.82080078125, Actor Loss: -15185.341064453125
Episode 5275: Time: 0.24832510948181152, Total Reward: 203.4544773430425, Q Loss: 260236.0244140625, Actor Loss: -23931.31866455078
Episode 5276: Time: 0.25910353660583496, Total Reward: 212.63711145261848, Q Loss: 243595.95947265625, Actor Loss: -23673.765014648438
Episode 5277: Time: 0.4641096591949463, Total Reward: 388.6575946358272, Q Loss: 444258.27685546875, Actor Loss: -43712.35705566406
Episode 5278: Time: 0.1622309684753418, Total Reward: 128.1023657321692, Q Loss: 148939.60546875, Actor Loss: -15281.366760253906
Episode 5279: Time: 0.10874772071838379, Total Reward: 82.37973671912171, Q Loss: 102082.10302734375, Actor Loss: -10333.7470703125
Episode 5280: Time: 0.3141803741455078, Total Reward: 259.57686104389995, Q Loss: 234725.29638671875, Actor Loss: -29677.682861328125
Episode 5281: Time: 0.48716163635253906, Total Reward: 406.80034295717917, Q Loss: 476827.01416015625, Actor Loss: -45909.51055908203
Episode 5282: Time: 0.3670227527618408, Total Reward: 303.3831256519052, Q Loss: 291624.07177734375, Actor Loss: -35363.39099121094
Episode 5283: Time: 0.549807071685791, Total Reward: 463.81260469017457, Q Loss: 470788.5275878906, Actor Loss: -52040.83544921875
Episode 5284: Time: 0.21596407890319824, Total Reward: 173.93178829120973, Q Loss: 228551.26586914062, Actor Loss: -20688.989990234375
Episode 5285: Time: 0.2376878261566162, Total Reward: 193.0218549631224, Q Loss: 222230.2578125, Actor Loss: -22393.585510253906
Episode 5286: Time: 0.4313993453979492, Total Reward: 361.0682495359258, Q Loss: 439741.20556640625, Actor Loss: -40743.04211425781
Episode 5287: Time: 0.37746524810791016, Total Reward: 314.33799939356743, Q Loss: 327146.8972167969, Actor Loss: -36447.34460449219
Episode 5288: Time: 0.5717592239379883, Total Reward: 481.949081373055, Q Loss: 549606.4216308594, Actor Loss: -54098.61828613281
Episode 5289: Time: 0.23762893676757812, Total Reward: 193.5332301952325, Q Loss: 249758.82373046875, Actor Loss: -22414.866638183594
Episode 5290: Time: 0.23764896392822266, Total Reward: 192.55738337340827, Q Loss: 228618.56298828125, Actor Loss: -22002.82049560547
Episode 5291: Time: 0.378218412399292, Total Reward: 314.8856215293786, Q Loss: 343050.6799316406, Actor Loss: -35399.92498779297
Episode 5292: Time: 0.39945054054260254, Total Reward: 333.7218545170872, Q Loss: 324298.90771484375, Actor Loss: -38188.93664550781
Episode 5293: Time: 0.3347616195678711, Total Reward: 274.9400914549078, Q Loss: 313090.38720703125, Actor Loss: -32376.46954345703
Episode 5294: Time: 0.44289541244506836, Total Reward: 369.30932127734167, Q Loss: 315645.0793457031, Actor Loss: -42998.345275878906
Episode 5295: Time: 0.3777780532836914, Total Reward: 314.80476281560925, Q Loss: 357726.3073730469, Actor Loss: -35459.21502685547

Episode 5296: Time: 0.4318673610687256, Total Reward: 360.88614794239675, Q Loss: 388831.9069824219, Actor Loss: -40981.681579589844
Episode 5297: Time: 0.09734773635864258, Total Reward: 72.38871046622792, Q Loss: 83512.71533203125, Actor Loss: -9145.563537597656
Episode 5298: Time: 0.15166497230529785, Total Reward: 119.53280922846379, Q Loss: 172540.62353515625, Actor Loss: -14596.518188476562
Episode 5299: Time: 0.30219125747680664, Total Reward: 249.50355797921608, Q Loss: 243906.18481445312, Actor Loss: -29141.580444335938
Validation Mean: 9355.226086750248, Validation Std: 0.4683668938444261
saving model
Episode 5300: Time: 0.26163721084594727, Total Reward: 212.31902768142209, Q Loss: 215245.32373046875, Actor Loss: -24771.897583007812
Episode 5301: Time: 0.19481754302978516, Total Reward: 156.53969363769846, Q Loss: 193096.40991210938, Actor Loss: -18212.288024902344
Episode 5302: Time: 0.13074541091918945, Total Reward: 101.25477152632756, Q Loss: 130786.38232421875, Actor Loss: -12289.179260253906
Episode 5303: Time: 0.5416240692138672, Total Reward: 454.34115894978635, Q Loss: 505809.5510253906, Actor Loss: -51934.22784423828
Episode 5304: Time: 0.31373047828674316, Total Reward: 258.5473266238366, Q Loss: 273224.3781738281, Actor Loss: -29710.386596679688
Episode 5305: Time: 0.2701692581176758, Total Reward: 221.7255159482771, Q Loss: 251125.3828125, Actor Loss: -26356.91766357422
Episode 5306: Time: 0.23776936531066895, Total Reward: 192.0877219500717, Q Loss: 225230.72607421875, Actor Loss: -23302.54522705078
Episode 5307: Time: 0.2377934455871582, Total Reward: 191.6169758422672, Q Loss: 228221.34350585938, Actor Loss: -21960.667053222656
Episode 5308: Time: 0.21593880653381348, Total Reward: 173.89069211303126, Q Loss: 175898.89501953125, Actor Loss: -19960.24676513672
Episode 5309: Time: 0.3453848361968994, Total Reward: 285.8564695104863, Q Loss: 296290.5517578125, Actor Loss: -32935.272216796875
Episode 5310: Time: 0.3453986644744873, Total Reward: 286.9852897040175, Q Loss: 277197.587890625, Actor Loss: -33740.425537109375
Episode 5311: Time: 0.3563699722290039, Total Reward: 295.31186224910186, Q Loss: 308749.142578125, Actor Loss: -34232.82598876953
Episode 5312: Time: 0.11917757987976074, Total Reward: 91.73268922172244, Q Loss: 92082.57373046875, Actor Loss: -11917.274780273438
Episode 5313: Time: 0.2706301212310791, Total Reward: 218.2065116163706, Q Loss: 222966.85986328125, Actor Loss: -25501.140258789062
Episode 5314: Time: 0.21791291236877441, Total Reward: 172.05322032205052, Q Loss: 209738.025390625, Actor Loss: -20255.28192138672
Episode 5315: Time: 0.11920523643493652, Total Reward: 90.58175898382952, Q Loss: 114933.9736328125, Actor Loss: -11607.90087890625
Episode 5316: Time: 0.48719263076782227, Total Reward: 407.7436947889674, Q Loss: 480136.77734375, Actor Loss: -46388.85400390625
Episode 5317: Time: 0.1946260929107666, Total Reward: 156.55483556643156, Q Loss: 234034.44873046875, Actor Loss: -17873.912658691406
Episode 5318: Time: 0.09769082069396973, Total Reward: 71.47473023324345, Q Loss: 95141.84521484375, Actor Loss: -9082.932556152344
Episode 5319: Time: 0.3244767189025879, Total Reward: 268.3239876410228, Q Loss: 347523.8171386719, Actor Loss: -30247.34588623047
Episode 5320: Time: 0.2697105407714844, Total Reward: 221.5826294602545, Q Loss: 277402.31103515625, Actor Loss: -25737.17266845703
Episode 5321: Time: 0.30320000648498535, Total Reward: 249.18319232711457, Q Loss: 294245.7775878906, Actor Loss: -29936.606506347656
Episode 5322: Time: 0.18358182907104492, Total Reward: 146.54454811814898, Q Loss: 153740.16479492188, Actor Loss: -18037.35626220703

Episode 5323: Time: 0.6582555770874023, Total Reward: 555.0387572403207, Q Loss: 647921.0334472656, Actor Loss: -65049.10546875
Episode 5324: Time: 0.291731595993042, Total Reward: 239.7724322184879, Q Loss: 249367.7177734375, Actor Loss: -27978.1455078125
Episode 5325: Time: 0.3563718795776367, Total Reward: 296.63660273317646, Q Loss: 323256.6135253906, Actor Loss: -35280.44512939453
Episode 5326: Time: 0.10834383964538574, Total Reward: 81.80869818062024, Q Loss: 95729.74389648438, Actor Loss: -10969.36669921875
Episode 5327: Time: 0.19515609741210938, Total Reward: 155.68116181377962, Q Loss: 180419.6376953125, Actor Loss: -19134.72235107422
Episode 5328: Time: 0.3565073013305664, Total Reward: 295.22033508362017, Q Loss: 351628.0729980469, Actor Loss: -34440.318908691406
Episode 5329: Time: 0.23782753944396973, Total Reward: 193.82074594978027, Q Loss: 236652.78002929688, Actor Loss: -23603.022521972656
Episode 5330: Time: 0.19460773468017578, Total Reward: 156.59687391156268, Q Loss: 178813.80419921875, Actor Loss: -18778.12957763672
Episode 5331: Time: 0.2811164855957031, Total Reward: 230.70525747676203, Q Loss: 224579.64770507812, Actor Loss: -27651.877380371094
Episode 5332: Time: 0.06533598899841309, Total Reward: 44.14045398009804, Q Loss: 72159.54272460938, Actor Loss: -6374.3226318359375
Episode 5333: Time: 0.20578742027282715, Total Reward: 166.18092542041285, Q Loss: 170896.80786132812, Actor Loss: -19947.813232421875
Episode 5334: Time: 0.7562501430511475, Total Reward: 641.0900545843009, Q Loss: 703029.255859375, Actor Loss: -74245.10290527344
Episode 5335: Time: 0.11968040466308594, Total Reward: 91.59446669144744, Q Loss: 80013.25219726562, Actor Loss: -11417.329833984375
Episode 5336: Time: 0.4533870220184326, Total Reward: 379.7717634670241, Q Loss: 403562.4265136719, Actor Loss: -44802.045471191406
Episode 5337: Time: 0.17302799224853516, Total Reward: 137.9987346084882, Q Loss: 186023.203125, Actor Loss: -16694.14190673828
Episode 5338: Time: 0.17371487617492676, Total Reward: 138.05103645555945, Q Loss: 198944.14501953125, Actor Loss: -16807.821350097656
Episode 5339: Time: 0.23784685134887695, Total Reward: 190.78537046536, Q Loss: 239410.72900390625, Actor Loss: -22666.237670898438
Episode 5340: Time: 0.4103889465332031, Total Reward: 343.07727106429485, Q Loss: 393388.13037109375, Actor Loss: -40266.09387207031
Episode 5341: Time: 0.28098392486572266, Total Reward: 230.34206056091838, Q Loss: 212477.95971679688, Actor Loss: -26663.725036621094
Episode 5342: Time: 0.5067446231842041, Total Reward: 425.8671505922814, Q Loss: 462114.568359375, Actor Loss: -50831.312561035156
Episode 5343: Time: 0.2919001579284668, Total Reward: 240.50023799336014, Q Loss: 307518.5349121094, Actor Loss: -27694.469787597656
Episode 5344: Time: 0.1729588508605957, Total Reward: 138.23574493251618, Q Loss: 160558.89990234375, Actor Loss: -16519.9873046875
Episode 5345: Time: 0.6371798515319824, Total Reward: 539.6475703689413, Q Loss: 623171.4445800781, Actor Loss: -62318.76397705078
Episode 5346: Time: 0.2381591796875, Total Reward: 194.61318429463176, Q Loss: 231351.66137695312, Actor Loss: -22941.396057128906
Episode 5347: Time: 0.18350839614868164, Total Reward: 147.28056731097826, Q Loss: 160673.76831054688, Actor Loss: -18239.209716796875
Episode 5348: Time: 0.0763704776763916, Total Reward: 53.921903458173965, Q Loss: 74509.47705078125, Actor Loss: -7301.510559082031
Episode 5349: Time: 0.10829877853393555, Total Reward: 81.86136377725546, Q Loss: 84208.91748046875, Actor Loss: -10637.9921875
Episode 5350: Time: 0.6153621673583984, Total Reward: 518.4841550922564, Q Loss: 581376.0808105469, Actor Loss: -61745.87384033203

Episode 5351: Time: 0.24922704696655273, Total Reward: 202.73459237484647, Q Loss: 230553.6796875, Actor Loss: -24346.524169921875
Episode 5352: Time: 0.3359861373901367, Total Reward: 276.4293420711597, Q Loss: 297462.57421875, Actor Loss: -33244.158630371094
Episode 5353: Time: 0.4120750427246094, Total Reward: 341.49360274946775, Q Loss: 429591.9597167969, Actor Loss: -40936.04724121094
Episode 5354: Time: 0.3788430690765381, Total Reward: 314.54904630021815, Q Loss: 492961.54638671875, Actor Loss: -37176.79504394531
Episode 5355: Time: 0.9826757907867432, Total Reward: 837.9090588364243, Q Loss: 1003911.3344726562, Actor Loss: -97980.75793457031
Episode 5356: Time: 0.18391895294189453, Total Reward: 147.44852840742104, Q Loss: 197979.94067382812, Actor Loss: -18245.67694091797
Episode 5357: Time: 0.28150415420532227, Total Reward: 230.30580016685025, Q Loss: 269779.2590332031, Actor Loss: -27764.583435058594
Episode 5358: Time: 0.1731867790222168, Total Reward: 134.87876656699277, Q Loss: 147482.091796875, Actor Loss: -16364.271240234375
Episode 5359: Time: 0.08718752861022949, Total Reward: 63.30397138427053, Q Loss: 82832.921875, Actor Loss: -8151.213195800781
Episode 5360: Time: 0.14069652557373047, Total Reward: 110.17844068282923, Q Loss: 138073.24560546875, Actor Loss: -14206.548889160156
Episode 5361: Time: 0.5292978286743164, Total Reward: 443.74261243317017, Q Loss: 492388.25341796875, Actor Loss: -52277.31524658203
Episode 5362: Time: 0.29161858558654785, Total Reward: 238.86699746638791, Q Loss: 257075.90405273438, Actor Loss: -28735.553588867188
Episode 5363: Time: 0.4117777347564697, Total Reward: 342.57566229367393, Q Loss: 300932.3251953125, Actor Loss: -39792.51428222656
Episode 5364: Time: 0.07604074478149414, Total Reward: 53.74003211637635, Q Loss: 97861.6884765625, Actor Loss: -7587.375549316406
Episode 5365: Time: 0.3027505874633789, Total Reward: 247.19127111500285, Q Loss: 318776.72705078125, Actor Loss: -30917.944396972656
Episode 5366: Time: 0.14063620567321777, Total Reward: 109.89813363964342, Q Loss: 167043.23291015625, Actor Loss: -13669.856079101562
Episode 5367: Time: 0.14089465141296387, Total Reward: 108.99633690250057, Q Loss: 163831.38232421875, Actor Loss: -13909.454528808594
Episode 5368: Time: 0.4320836067199707, Total Reward: 359.5567621702923, Q Loss: 520786.39599609375, Actor Loss: -44280.71063232422
Episode 5369: Time: 0.19476056098937988, Total Reward: 156.89681160651438, Q Loss: 200680.53540039062, Actor Loss: -20016.297607421875
Episode 5370: Time: 0.4214658737182617, Total Reward: 352.51786477839613, Q Loss: 375171.3195800781, Actor Loss: -42127.44189453125
Episode 5371: Time: 0.17291855812072754, Total Reward: 138.09135809477965, Q Loss: 210944.41015625, Actor Loss: -17479.9716796875
Episode 5372: Time: 0.47516441345214844, Total Reward: 398.8803932441317, Q Loss: 457696.81005859375, Actor Loss: -47902.375915527344
Episode 5373: Time: 0.11914467811584473, Total Reward: 90.90045383325813, Q Loss: 126661.83984375, Actor Loss: -11720.602722167969
Episode 5374: Time: 0.32396697998046875, Total Reward: 267.9539561968731, Q Loss: 332379.11328125, Actor Loss: -32504.816528320312
Episode 5375: Time: 0.4971437454223633, Total Reward: 416.1569583330256, Q Loss: 552605.4504394531, Actor Loss: -49102.07214355469
Episode 5376: Time: 0.3347139358520508, Total Reward: 277.7994511009809, Q Loss: 320878.9248046875, Actor Loss: -33025.740966796875
Episode 5377: Time: 0.3135533332824707, Total Reward: 257.54578838657324, Q Loss: 299793.068359375, Actor Loss: -31476.097900390625
Episode 5378: Time: 0.2593250274658203, Total Reward: 212.07549910782598, Q Loss: 241958.0234375, Actor Loss: -25813.356201171875

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Episode 5379: Time: 0.34552812576293945, Total Reward: 284.74720411725235, Q
Loss: 402215.2761230469, Actor Loss: -35716.786682128906
Episode 5380: Time: 0.5187499523162842, Total Reward: 434.3327440439943, Q L
oss: 477056.67138671875, Actor Loss: -52401.047912597656
Episode 5381: Time: 0.4106559753417969, Total Reward: 342.85289124579776, Q
Loss: 443380.6472167969, Actor Loss: -41524.58837890625
Episode 5382: Time: 0.3352668285369873, Total Reward: 277.83149901165166, Q
Loss: 341955.8005371094, Actor Loss: -34645.052490234375
Episode 5383: Time: 0.3573300838470459, Total Reward: 294.6370168858078, Q L
oss: 339384.6350097656, Actor Loss: -36318.27099609375
Episode 5384: Time: 0.12020039558410645, Total Reward: 91.79986749220313, Q
Loss: 141185.099609375, Actor Loss: -12625.112182617188
Episode 5385: Time: 0.44423437118530273, Total Reward: 369.56801392842357, Q
Loss: 383741.583984375, Actor Loss: -45301.657165527344
Episode 5386: Time: 0.23842096328735352, Total Reward: 192.8309717759835, Q
Loss: 243618.1494140625, Actor Loss: -24380.35986328125
Episode 5387: Time: 0.5190324783325195, Total Reward: 435.3210406299876, Q L
oss: 558278.0178222656, Actor Loss: -53531.96307373047
Episode 5388: Time: 0.22702646255493164, Total Reward: 184.28669687996185, Q
Loss: 265122.1455078125, Actor Loss: -23287.017333984375
Episode 5389: Time: 0.4644489288330078, Total Reward: 387.4847450033099, Q L
oss: 489226.8776855469, Actor Loss: -46871.87823486328
Episode 5390: Time: 0.18365049362182617, Total Reward: 146.93492712352295, Q
Loss: 172543.6669921875, Actor Loss: -18960.702209472656
Episode 5391: Time: 0.19455218315124512, Total Reward: 156.6660573876985, Q
Loss: 204550.9921875, Actor Loss: -19432.74102783203
Episode 5392: Time: 0.09754371643066406, Total Reward: 72.49536118826123, Q
Loss: 110755.3330078125, Actor Loss: -10022.945068359375
Episode 5393: Time: 0.6150267124176025, Total Reward: 518.8595059308224, Q L
oss: 611009.3325195312, Actor Loss: -61601.56774902344
Episode 5394: Time: 0.15142607688903809, Total Reward: 118.17566746654559, Q
Loss: 175675.2255859375, Actor Loss: -14472.899230957031
Episode 5395: Time: 0.0977175235748291, Total Reward: 72.45125584067361, Q L
oss: 71842.54345703125, Actor Loss: -9531.763000488281
Episode 5396: Time: 0.09742331504821777, Total Reward: 72.51837112485707, Q
Loss: 93291.71044921875, Actor Loss: -9412.309326171875
Episode 5397: Time: 0.1624290943145752, Total Reward: 129.11565004868973, Q
Loss: 171873.18310546875, Actor Loss: -17027.03240966797
Episode 5398: Time: 0.24904108047485352, Total Reward: 202.9359525095489, Q
Loss: 284760.24609375, Actor Loss: -26181.736083984375
Episode 5399: Time: 0.378159761428833, Total Reward: 314.4908853877356, Q Lo
ss: 376986.703125, Actor Loss: -38108.83203125
Validation Mean: 9354.715937901414, Validation Std: 0.4773924492351312
saving model
Episode 5400: Time: 0.20110321044921875, Total Reward: 156.04309540302702, Q
Loss: 225107.28759765625, Actor Loss: -20178.934936523438
Episode 5401: Time: 0.0777122974395752, Total Reward: 53.64055273376066, Q L
oss: 110141.1484375, Actor Loss: -7926.0142822265625
Episode 5402: Time: 0.29790806770324707, Total Reward: 239.6720915280058, Q
Loss: 287027.9677734375, Actor Loss: -29333.308349609375
Episode 5403: Time: 0.19838500022888184, Total Reward: 156.62353359006255, Q
Loss: 300313.4541015625, Actor Loss: -20204.035095214844
Episode 5404: Time: 0.22076082229614258, Total Reward: 175.05179144648605, Q
Loss: 244522.2109375, Actor Loss: -22850.14483642578
Episode 5405: Time: 0.3638303279876709, Total Reward: 296.29633099337207, Q
Loss: 362519.041015625, Actor Loss: -37346.49530029297
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Episode 5406: Time: 0.17624664306640625, Total Reward: 137.23225829785778, Q Loss: 201330.59936523438, Actor Loss: -17874.549194335938
Episode 5407: Time: 0.2318577766418457, Total Reward: 183.64673535612744, Q Loss: 253591.16552734375, Actor Loss: -22282.289001464844
Episode 5408: Time: 0.3537917137145996, Total Reward: 285.4779665204965, Q Loss: 354670.54931640625, Actor Loss: -36212.25500488281
Episode 5409: Time: 0.5286266803741455, Total Reward: 434.93275463499424, Q Loss: 603012.9267578125, Actor Loss: -53835.41638183594
Episode 5410: Time: 0.22115159034729004, Total Reward: 173.04786177419288, Q Loss: 177811.21801757812, Actor Loss: -22062.762634277344
Episode 5411: Time: 0.5498471260070801, Total Reward: 454.887026173663, Q Loss: 551601.68359375, Actor Loss: -54233.072814941406
Episode 5412: Time: 0.19870758056640625, Total Reward: 156.69766227512594, Q Loss: 285124.85009765625, Actor Loss: -19209.084411621094
Episode 5413: Time: 0.16568827629089355, Total Reward: 128.65334232456857, Q Loss: 206990.19921875, Actor Loss: -16580.383544921875
Episode 5414: Time: 0.19839978218078613, Total Reward: 155.57734059880312, Q Loss: 192525.9716796875, Actor Loss: -19699.018615722656
Episode 5415: Time: 0.5728259086608887, Total Reward: 472.4392284661419, Q Loss: 552478.6298828125, Actor Loss: -57640.978271484375
Episode 5416: Time: 0.2093796730041504, Total Reward: 165.9698098338998, Q Loss: 181792.28491210938, Actor Loss: -20604.244567871094
Episode 5417: Time: 0.22053766250610352, Total Reward: 174.5815680978892, Q Loss: 189119.50708007812, Actor Loss: -22483.329956054688
Episode 5418: Time: 0.40702152252197266, Total Reward: 333.0537548371641, Q Loss: 390284.20068359375, Actor Loss: -40916.024169921875
Episode 5419: Time: 0.39683008193969727, Total Reward: 324.0223158291629, Q Loss: 434210.7666015625, Actor Loss: -40620.58935546875
Episode 5420: Time: 0.26453709602355957, Total Reward: 212.26429744734895, Q Loss: 221804.06591796875, Actor Loss: -26871.72137451172
Episode 5421: Time: 0.15403532981872559, Total Reward: 119.40547237129934, Q Loss: 157776.80712890625, Actor Loss: -15668.524719238281
Episode 5422: Time: 0.4180436134338379, Total Reward: 340.5719545648958, Q Loss: 431452.8798828125, Actor Loss: -43620.86163330078
Episode 5423: Time: 0.26510071754455566, Total Reward: 212.12212686319654, Q Loss: 286927.02392578125, Actor Loss: -27059.54620361328
Episode 5424: Time: 0.47361207008361816, Total Reward: 388.5933440333081, Q Loss: 463945.1896972656, Actor Loss: -48676.55334472656
Episode 5425: Time: 0.10012674331665039, Total Reward: 72.53363302958032, Q Loss: 85744.6875, Actor Loss: -10212.887817382812
Episode 5426: Time: 0.34178709983825684, Total Reward: 277.13566264364755, Q Loss: 312224.5771484375, Actor Loss: -34843.033203125
Episode 5427: Time: 0.2542572021484375, Total Reward: 202.9570960297465, Q Loss: 266944.8996582031, Actor Loss: -25851.578979492188
Episode 5428: Time: 0.23157429695129395, Total Reward: 184.13936603498152, Q Loss: 190238.31884765625, Actor Loss: -23348.00128173828
Episode 5429: Time: 0.18708562850952148, Total Reward: 147.48318629552125, Q Loss: 192144.55517578125, Actor Loss: -19205.63330078125
Episode 5430: Time: 0.5284409523010254, Total Reward: 436.8567216723019, Q Loss: 521962.8581542969, Actor Loss: -55712.107177734375
Episode 5431: Time: 0.2974843978881836, Total Reward: 239.89121606193564, Q Loss: 319913.2687988281, Actor Loss: -29033.412048339844
Episode 5432: Time: 0.1432507038116455, Total Reward: 110.4352721572975, Q Loss: 169865.5869140625, Actor Loss: -14183.028869628906
Episode 5433: Time: 0.24277043342590332, Total Reward: 193.47777243244155, Q Loss: 253350.96044921875, Actor Loss: -24940.96435546875

Episode 5434: Time: 0.7595419883728027, Total Reward: 631.2655524872746, Q Loss: 827108.5844726562, Actor Loss: -75555.42456054688
Episode 5435: Time: 0.17641401290893555, Total Reward: 138.45334874811513, Q Loss: 140076.177734375, Actor Loss: -18086.290405273438
Episode 5436: Time: 0.2207350730895996, Total Reward: 175.48603310049123, Q Loss: 250056.5693359375, Actor Loss: -22088.922302246094
Episode 5437: Time: 0.35276103019714355, Total Reward: 286.96072451544217, Q Loss: 325840.41162109375, Actor Loss: -36533.22155761719
Episode 5438: Time: 0.37468647956848145, Total Reward: 305.0592346527794, Q Loss: 375863.130859375, Actor Loss: -38068.18322753906
Episode 5439: Time: 0.5849993228912354, Total Reward: 479.60739966759115, Q Loss: 602408.6281738281, Actor Loss: -60142.962158203125
Episode 5440: Time: 0.13255572319030762, Total Reward: 100.65340963604147, Q Loss: 123605.43505859375, Actor Loss: -13322.267333984375
Episode 5441: Time: 0.6164710521697998, Total Reward: 506.86309623750907, Q Loss: 641492.2661132812, Actor Loss: -62513.596130371094
Episode 5442: Time: 0.3310384750366211, Total Reward: 266.0106209097255, Q Loss: 398183.5087890625, Actor Loss: -33342.55859375
Episode 5443: Time: 0.2755160331726074, Total Reward: 222.12530128300392, Q Loss: 351424.33203125, Actor Loss: -28868.318237304688
Episode 5444: Time: 0.14308643341064453, Total Reward: 109.73180078434852, Q Loss: 164230.60131835938, Actor Loss: -14629.671936035156
Episode 5445: Time: 0.17689871788024902, Total Reward: 138.24700876977116, Q Loss: 180262.71264648438, Actor Loss: -17908.26806640625
Episode 5446: Time: 0.25411105155944824, Total Reward: 200.31398972029973, Q Loss: 234070.0771484375, Actor Loss: -27108.780517578125
Episode 5447: Time: 0.4961090087890625, Total Reward: 405.7299620978419, Q Loss: 507901.2431640625, Actor Loss: -51067.185546875
Episode 5448: Time: 0.17641472816467285, Total Reward: 137.3061969317967, Q Loss: 179747.09130859375, Actor Loss: -17742.668518066406
Episode 5449: Time: 0.2208857536315918, Total Reward: 175.34796900904118, Q Loss: 217554.24609375, Actor Loss: -22897.43768310547
Episode 5450: Time: 0.37466859817504883, Total Reward: 304.546385296463, Q Loss: 339359.2155761719, Actor Loss: -38619.06481933594
Episode 5451: Time: 0.5394456386566162, Total Reward: 445.33748588118834, Q Loss: 585991.634765625, Actor Loss: -55777.82928466797
Episode 5452: Time: 0.39675283432006836, Total Reward: 323.53685959853954, Q Loss: 403142.06689453125, Actor Loss: -42727.49627685547
Episode 5453: Time: 0.19826316833496094, Total Reward: 155.13094664971712, Q Loss: 219571.12158203125, Actor Loss: -20925.44024658203
Episode 5454: Time: 0.5399963855743408, Total Reward: 444.52259122031603, Q Loss: 522979.1496582031, Actor Loss: -54740.476806640625
Episode 5455: Time: 0.4194619655609131, Total Reward: 341.9255801674133, Q Loss: 489247.7795410156, Actor Loss: -42046.56213378906
Episode 5456: Time: 0.27683496475219727, Total Reward: 221.9027342000691, Q Loss: 272334.5927734375, Actor Loss: -27977.495239257812
Episode 5457: Time: 0.23297595977783203, Total Reward: 184.4151839676871, Q Loss: 265228.22705078125, Actor Loss: -24196.945556640625
Episode 5458: Time: 0.319965124130249, Total Reward: 259.5714539677737, Q Loss: 334405.2353515625, Actor Loss: -33336.84100341797
Episode 5459: Time: 0.298583984375, Total Reward: 240.67446966942683, Q Loss: 297840.02978515625, Actor Loss: -31061.585571289062
Episode 5460: Time: 0.14358854293823242, Total Reward: 109.88173262779355, Q Loss: 209755.38159179688, Actor Loss: -15114.046508789062
Episode 5461: Time: 0.27581071853637695, Total Reward: 219.63572799188236, Q Loss: 364082.078125, Actor Loss: -29097.846618652344

Episode 5462: Time: 0.15448641777038574, Total Reward: 119.05904946397978, Q Loss: 162002.56494140625, Actor Loss: -15973.078796386719
Episode 5463: Time: 0.30891990661621094, Total Reward: 249.1474121743852, Q Loss: 383303.94189453125, Actor Loss: -31869.64373779297
Episode 5464: Time: 0.14347577095031738, Total Reward: 110.31084700098243, Q Loss: 113303.76318359375, Actor Loss: -14724.708984375
Episode 5465: Time: 0.14368438720703125, Total Reward: 108.90407388577447, Q Loss: 148625.70629882812, Actor Loss: -14586.755859375
Episode 5466: Time: 0.22028851509094238, Total Reward: 174.82764257238043, Q Loss: 238739.49951171875, Actor Loss: -23234.290893554688
Episode 5467: Time: 0.13220643997192383, Total Reward: 100.77898920948664, Q Loss: 146385.17626953125, Actor Loss: -14278.950805664062
Episode 5468: Time: 0.7158801555633545, Total Reward: 592.8117977487482, Q Loss: 713124.31640625, Actor Loss: -74927.53784179688
Episode 5469: Time: 0.15501880645751953, Total Reward: 117.50598258401214, Q Loss: 140761.69873046875, Actor Loss: -15931.080871582031
Episode 5470: Time: 0.5401661396026611, Total Reward: 446.00329063152134, Q Loss: 578491.9985351562, Actor Loss: -56963.86804199219
Episode 5471: Time: 0.3748500347137451, Total Reward: 305.2098891971234, Q Loss: 372701.44665527344, Actor Loss: -39023.896057128906
Episode 5472: Time: 0.22105669975280762, Total Reward: 174.79714534383928, Q Loss: 242428.58740234375, Actor Loss: -23462.837890625
Episode 5473: Time: 0.055342674255371094, Total Reward: 34.954070617201964, Q Loss: 46783.79638671875, Actor Loss: -5841.2376708984375
Episode 5474: Time: 0.4084908962249756, Total Reward: 331.8349845023749, Q Loss: 401037.02734375, Actor Loss: -42253.414978027344
Episode 5475: Time: 0.48571133613586426, Total Reward: 399.031725942066, Q Loss: 515161.81298828125, Actor Loss: -50231.472106933594
Episode 5476: Time: 0.6621534824371338, Total Reward: 547.7543953649201, Q Loss: 719396.7055664062, Actor Loss: -69515.83599853516
Episode 5477: Time: 0.8170912265777588, Total Reward: 677.7267993593413, Q Loss: 947308.5222167969, Actor Loss: -86710.11047363281
Episode 5478: Time: 0.4203453063964844, Total Reward: 342.7799538321353, Q Loss: 504910.10400390625, Actor Loss: -45031.259033203125
Episode 5479: Time: 0.3536112308502197, Total Reward: 285.28165901463854, Q Loss: 467790.79150390625, Actor Loss: -37304.2646484375
Episode 5480: Time: 0.3095264434814453, Total Reward: 249.0864291792043, Q Loss: 354570.2080078125, Actor Loss: -32712.887084960938
Episode 5481: Time: 0.2763407230377197, Total Reward: 219.3952688336457, Q Loss: 280366.1279296875, Actor Loss: -30111.839477539062
Episode 5482: Time: 0.24314403533935547, Total Reward: 193.10319770269803, Q Loss: 303092.48779296875, Actor Loss: -25517.375427246094
Episode 5483: Time: 0.23255157470703125, Total Reward: 181.7401582848222, Q Loss: 234158.04833984375, Actor Loss: -24323.20050048828
Episode 5484: Time: 0.16562891006469727, Total Reward: 127.94717371911189, Q Loss: 223449.49072265625, Actor Loss: -17913.530151367188
Episode 5485: Time: 0.5965840816497803, Total Reward: 491.49023274739625, Q Loss: 760266.2583007812, Actor Loss: -63910.57000732422
Episode 5486: Time: 0.23235678672790527, Total Reward: 184.85223382279528, Q Loss: 258647.88720703125, Actor Loss: -24888.765991210938
Episode 5487: Time: 0.22119998931884766, Total Reward: 175.92479974795185, Q Loss: 214044.60791015625, Actor Loss: -23448.642028808594
Episode 5488: Time: 0.2103424072265625, Total Reward: 163.31418199343264, Q Loss: 219216.64892578125, Actor Loss: -21461.399047851562
Episode 5489: Time: 0.5517387390136719, Total Reward: 455.1503888121473, Q Loss: 572200.2744140625, Actor Loss: -58613.29797363281

Episode 5490: Time: 0.23232746124267578, Total Reward: 182.1538562188637, Q Loss: 303781.787109375, Actor Loss: -24846.40496826172
Episode 5491: Time: 0.23190808296203613, Total Reward: 183.66401537515992, Q Loss: 275323.7482910156, Actor Loss: -24598.841857910156
Episode 5492: Time: 0.30851316452026367, Total Reward: 249.69897713555045, Q Loss: 324391.2216796875, Actor Loss: -33217.75927734375
Episode 5493: Time: 0.08846759796142578, Total Reward: 62.76471704668428, Q Loss: 126252.78662109375, Actor Loss: -9184.705078125
Episode 5494: Time: 0.6825082302093506, Total Reward: 566.366261189409, Q Loss: 744470.3852539062, Actor Loss: -71479.71508789062
Episode 5495: Time: 0.26488518714904785, Total Reward: 212.43395752425175, Q Loss: 235935.86499023438, Actor Loss: -27889.52685546875
Episode 5496: Time: 0.4076516628265381, Total Reward: 332.7885986707668, Q Loss: 387003.3532714844, Actor Loss: -42283.398010253906
Episode 5497: Time: 0.27607226371765137, Total Reward: 222.22052624918916, Q Loss: 303789.30322265625, Actor Loss: -28736.190551757812
Episode 5498: Time: 0.1650698184967041, Total Reward: 128.81068266800617, Q Loss: 222783.9951171875, Actor Loss: -18010.400817871094
Episode 5499: Time: 0.4298970699310303, Total Reward: 351.34989298759865, Q Loss: 532513.8217773438, Actor Loss: -45646.48779296875
Validation Mean: 9355.376854056769, Validation Std: 0.9270675136400902
saving model
Episode 5500: Time: 0.40920186042785645, Total Reward: 334.38867969797604, Q Loss: 578504.3491210938, Actor Loss: -43468.91387939453
Episode 5501: Time: 0.2656519412994385, Total Reward: 212.24067799446445, Q Loss: 239995.69458007812, Actor Loss: -28042.71484375
Episode 5502: Time: 0.4414994716644287, Total Reward: 361.7750136642075, Q Loss: 481293.955078125, Actor Loss: -46062.781188964844
Episode 5503: Time: 0.24295687675476074, Total Reward: 194.07560336201243, Q Loss: 248965.37744140625, Actor Loss: -26183.704956054688
Episode 5504: Time: 0.671438455581665, Total Reward: 556.1280758734242, Q Loss: 747301.0314941406, Actor Loss: -72822.2173461914
Episode 5505: Time: 0.27604222297668457, Total Reward: 219.58349558384083, Q Loss: 359663.5517578125, Actor Loss: -29811.53692626953
Episode 5506: Time: 0.6831996440887451, Total Reward: 563.972961889988, Q Loss: 662925.3862304688, Actor Loss: -73796.21325683594
Episode 5507: Time: 0.4626338481903076, Total Reward: 380.3397334658806, Q Loss: 403069.21240234375, Actor Loss: -49303.556396484375
Episode 5508: Time: 0.3525974750518799, Total Reward: 285.8061517800882, Q Loss: 345705.328125, Actor Loss: -38234.16619873047
Episode 5509: Time: 0.1432201862335205, Total Reward: 110.3768672031344, Q Loss: 176501.77734375, Actor Loss: -16500.629028320312
Episode 5510: Time: 0.4850127696990967, Total Reward: 397.45725864065844, Q Loss: 546365.4260253906, Actor Loss: -52641.977294921875
Episode 5511: Time: 0.616485595703125, Total Reward: 509.95485656262434, Q Loss: 735109.9821777344, Actor Loss: -65470.65270996094
Episode 5512: Time: 0.14357304573059082, Total Reward: 109.16922601449815, Q Loss: 158192.2919921875, Actor Loss: -15170.238525390625
Episode 5513: Time: 0.12179350852966309, Total Reward: 91.6217444707944, Q Loss: 129760.86962890625, Actor Loss: -13292.47705078125
Episode 5514: Time: 0.16538000106811523, Total Reward: 128.29381896602132, Q Loss: 150823.50341796875, Actor Loss: -17641.814331054688
Episode 5515: Time: 0.18789911270141602, Total Reward: 146.30903145069004, Q Loss: 192644.35131835938, Actor Loss: -19715.491638183594
Episode 5516: Time: 0.2209632396697998, Total Reward: 174.03397667617207, Q Loss: 263259.08642578125, Actor Loss: -23502.419372558594

Episode 5517: Time: 0.14337468147277832, Total Reward: 109.50707083337022, Q Loss: 159864.875, Actor Loss: -15475.205810546875
Episode 5518: Time: 0.584028959274292, Total Reward: 480.80662651811065, Q Loss: 748381.4970703125, Actor Loss: -64832.272521972656
Episode 5519: Time: 0.5943703651428223, Total Reward: 491.3139514025761, Q Loss: 641016.8518066406, Actor Loss: -64298.31396484375
Episode 5520: Time: 0.2755141258239746, Total Reward: 221.5310914932448, Q Loss: 297638.3483886719, Actor Loss: -30333.941650390625
Episode 5521: Time: 0.22112536430358887, Total Reward: 174.65754718931547, Q Loss: 246924.77783203125, Actor Loss: -23263.118591308594
Episode 5522: Time: 0.6953396797180176, Total Reward: 575.5670256609803, Q Loss: 914091.4392089844, Actor Loss: -74239.95343017578
Episode 5523: Time: 0.14384222030639648, Total Reward: 110.24788045910016, Q Loss: 190715.67993164062, Actor Loss: -16248.857055664062
Episode 5524: Time: 0.12218189239501953, Total Reward: 90.96889171749385, Q Loss: 123054.3623046875, Actor Loss: -12578.544921875
Episode 5525: Time: 0.15455174446105957, Total Reward: 119.2861059374659, Q Loss: 167295.79833984375, Actor Loss: -16311.638671875
Episode 5526: Time: 0.0780649185180664, Total Reward: 53.93734725029003, Q Loss: 84836.17333984375, Actor Loss: -8587.506713867188
Episode 5527: Time: 0.19835615158081055, Total Reward: 156.3738053800198, Q Loss: 272233.5263671875, Actor Loss: -22237.013671875
Episode 5528: Time: 0.5727806091308594, Total Reward: 473.6352524582265, Q Loss: 657531.7314453125, Actor Loss: -62334.54431152344
Episode 5529: Time: 0.09952425956726074, Total Reward: 72.98685696163689, Q Loss: 132422.47314453125, Actor Loss: -10065.704345703125
Episode 5530: Time: 0.2649500370025635, Total Reward: 208.99182124812233, Q Loss: 321651.841796875, Actor Loss: -28942.29705810547
Episode 5531: Time: 0.253645658493042, Total Reward: 202.5736904804788, Q Loss: 288750.8154296875, Actor Loss: -28047.636352539062
Episode 5532: Time: 0.20969772338867188, Total Reward: 166.1519816270898, Q Loss: 206586.431640625, Actor Loss: -23085.581420898438
Episode 5533: Time: 0.2974584102630615, Total Reward: 237.74882353305907, Q Loss: 346460.2106933594, Actor Loss: -32545.500366210938
Episode 5534: Time: 0.5214323997497559, Total Reward: 435.6181316579574, Q Loss: 569081.1459960938, Actor Loss: -57571.90905761719
Episode 5535: Time: 0.0756230354309082, Total Reward: 53.77602572273626, Q Loss: 100667.14453125, Actor Loss: -8448.814819335938
Episode 5536: Time: 0.3443944454193115, Total Reward: 286.31065821048054, Q Loss: 389774.65478515625, Actor Loss: -39083.96545410156
Episode 5537: Time: 0.46279191970825195, Total Reward: 388.24335229758447, Q Loss: 544845.7631835938, Actor Loss: -51792.42272949219
Episode 5538: Time: 0.21629858016967773, Total Reward: 174.92659735090479, Q Loss: 231951.84130859375, Actor Loss: -24400.838989257812
Episode 5539: Time: 0.21589279174804688, Total Reward: 175.69813354832618, Q Loss: 291967.14453125, Actor Loss: -24022.502990722656
Episode 5540: Time: 0.2800312042236328, Total Reward: 231.23969310906108, Q Loss: 369977.45751953125, Actor Loss: -31090.27734375
Episode 5541: Time: 0.32262396812438965, Total Reward: 268.2645020840868, Q Loss: 335979.6435546875, Actor Loss: -37117.8115234375
Episode 5542: Time: 0.44190335273742676, Total Reward: 370.7478163054814, Q Loss: 625754.1733398438, Actor Loss: -48960.90802001953
Episode 5543: Time: 0.39849066734313965, Total Reward: 332.51910356816734, Q Loss: 509290.25, Actor Loss: -45466.8125
Episode 5544: Time: 0.34509944915771484, Total Reward: 285.9009401865968, Q Loss: 484373.3916015625, Actor Loss: -39283.328857421875

Episode 5545: Time: 0.24795103073120117, Total Reward: 200.3495897499596, Q Loss: 283008.953125, Actor Loss: -28730.108764648438
Episode 5546: Time: 0.4089012145996094, Total Reward: 341.725881715181, Q Loss: 470320.4064941406, Actor Loss: -45919.82556152344
Episode 5547: Time: 0.3657824993133545, Total Reward: 305.91889995423355, Q Loss: 503900.2109375, Actor Loss: -40886.03350830078
Episode 5548: Time: 0.11853814125061035, Total Reward: 91.36777221260837, Q Loss: 164486.82470703125, Actor Loss: -13069.050231933594
Episode 5549: Time: 0.3661081790924072, Total Reward: 305.9739651813343, Q Loss: 507304.62890625, Actor Loss: -41064.81494140625
Episode 5550: Time: 0.3447144031524658, Total Reward: 286.6799218534774, Q Loss: 412999.896484375, Actor Loss: -38849.71765136719
Episode 5551: Time: 0.25856947898864746, Total Reward: 211.12991500054036, Q Loss: 362967.716796875, Actor Loss: -28642.47869873047
Episode 5552: Time: 0.22620129585266113, Total Reward: 183.91099890526374, Q Loss: 237010.89501953125, Actor Loss: -24973.998779296875
Episode 5553: Time: 0.32383108139038086, Total Reward: 267.1641640388062, Q Loss: 457159.11279296875, Actor Loss: -36782.646728515625
Episode 5554: Time: 0.1618516445159912, Total Reward: 128.45657197775154, Q Loss: 199866.91064453125, Actor Loss: -18701.330810546875
Episode 5555: Time: 0.20524024963378906, Total Reward: 165.4913288588061, Q Loss: 335743.3974609375, Actor Loss: -23668.367065429688
Episode 5556: Time: 0.17292094230651855, Total Reward: 137.9635816440299, Q Loss: 246218.53564453125, Actor Loss: -20631.734008789062
Episode 5557: Time: 0.19405102729797363, Total Reward: 153.47249858934492, Q Loss: 234761.3154296875, Actor Loss: -21889.05078125
Episode 5558: Time: 0.17205524444580078, Total Reward: 137.40855074563316, Q Loss: 242102.7197265625, Actor Loss: -19726.812622070312
Episode 5559: Time: 0.355241060256958, Total Reward: 296.0564593338112, Q Loss: 358278.73779296875, Actor Loss: -40180.307373046875
Episode 5560: Time: 0.11874032020568848, Total Reward: 90.7937306063547, Q Loss: 149902.81689453125, Actor Loss: -13450.311645507812
Episode 5561: Time: 0.2583475112915039, Total Reward: 211.74569245207286, Q Loss: 327091.02099609375, Actor Loss: -29454.194885253906
Episode 5562: Time: 0.31188368797302246, Total Reward: 257.2645794392614, Q Loss: 430790.98095703125, Actor Loss: -36641.22253417969
Episode 5563: Time: 0.23692059516906738, Total Reward: 190.9976060217589, Q Loss: 316404.65966796875, Actor Loss: -26703.03973388672
Episode 5564: Time: 0.5379543304443359, Total Reward: 454.1005017389875, Q Loss: 692471.0690917969, Actor Loss: -59460.323303222656
Episode 5565: Time: 0.8594217300415039, Total Reward: 734.0642345483274, Q Loss: 1091926.6291503906, Actor Loss: -98362.76959228516
Episode 5566: Time: 0.21510934829711914, Total Reward: 174.6380381240127, Q Loss: 257883.96142578125, Actor Loss: -23223.029296875
Episode 5567: Time: 0.25838565826416016, Total Reward: 209.67622957387874, Q Loss: 321188.6494140625, Actor Loss: -29920.647583007812
Episode 5568: Time: 0.25864434242248535, Total Reward: 212.87897896332112, Q Loss: 380420.50732421875, Actor Loss: -29681.6796875
Episode 5569: Time: 0.4302945137023926, Total Reward: 361.23657201088866, Q Loss: 507135.13134765625, Actor Loss: -48916.314514160156
Episode 5570: Time: 0.40853404998779297, Total Reward: 340.6929759799695, Q Loss: 447153.91455078125, Actor Loss: -47283.47521972656
Episode 5571: Time: 0.6236848831176758, Total Reward: 529.6831928637818, Q Loss: 804023.3427734375, Actor Loss: -72497.0394897461
Episode 5572: Time: 0.18272686004638672, Total Reward: 146.8043388671274, Q Loss: 235949.17138671875, Actor Loss: -21493.212036132812

Episode 5573: Time: 0.30094194412231445, Total Reward: 248.0529065450079, Q Loss: 475786.8623046875, Actor Loss: -34141.255859375
Episode 5574: Time: 0.46186113357543945, Total Reward: 389.33342609478143, Q Loss: 617917.908203125, Actor Loss: -53895.54919433594
Episode 5575: Time: 0.2902491092681885, Total Reward: 238.62549102691383, Q Loss: 416897.60888671875, Actor Loss: -32921.58465576172
Episode 5576: Time: 0.16138815879821777, Total Reward: 128.45455153366305, Q Loss: 218361.17724609375, Actor Loss: -19379.206909179688
Episode 5577: Time: 0.23723912239074707, Total Reward: 192.90824141126947, Q Loss: 308273.4267578125, Actor Loss: -27219.8818359375
Episode 5578: Time: 0.16183972358703613, Total Reward: 128.10842030587673, Q Loss: 223262.69091796875, Actor Loss: -18886.798095703125
Episode 5579: Time: 0.3443434238433838, Total Reward: 285.10665352985177, Q Loss: 467334.7858886719, Actor Loss: -39650.21667480469
Episode 5580: Time: 0.19329071044921875, Total Reward: 154.48057534223267, Q Loss: 262318.50927734375, Actor Loss: -22533.710205078125
Episode 5581: Time: 0.2797844409942627, Total Reward: 231.35523897782187, Q Loss: 337512.0966796875, Actor Loss: -32278.954345703125
Episode 5582: Time: 0.16133594512939453, Total Reward: 129.07347831617034, Q Loss: 250156.2509765625, Actor Loss: -18797.3310546875
Episode 5583: Time: 0.5048184394836426, Total Reward: 425.73383433154765, Q Loss: 651155.11328125, Actor Loss: -60295.67370605469
Episode 5584: Time: 0.3232851028442383, Total Reward: 265.02260666328795, Q Loss: 438323.44091796875, Actor Loss: -37410.09069824219
Episode 5585: Time: 0.31247377395629883, Total Reward: 258.79031857371143, Q Loss: 415873.72998046875, Actor Loss: -35334.03192138672
Episode 5586: Time: 0.10762310028076172, Total Reward: 81.66144979335162, Q Loss: 116900.0673828125, Actor Loss: -12472.91943359375
Episode 5587: Time: 0.775233268737793, Total Reward: 657.8676913161312, Q Loss: 1080025.0827636719, Actor Loss: -88363.8383178711
Episode 5588: Time: 0.398726224899292, Total Reward: 331.90756970743814, Q Loss: 530947.4135742188, Actor Loss: -46770.89697265625
Episode 5589: Time: 0.3119626045227051, Total Reward: 259.07278040166614, Q Loss: 415376.16845703125, Actor Loss: -36085.82263183594
Episode 5590: Time: 0.2694435119628906, Total Reward: 222.21175994218262, Q Loss: 323033.20849609375, Actor Loss: -31517.597412109375
Episode 5591: Time: 0.3654956817626953, Total Reward: 302.9579363692418, Q Loss: 465079.923828125, Actor Loss: -42894.00537109375
Episode 5592: Time: 0.1398484706878662, Total Reward: 110.01088665940831, Q Loss: 155157.47998046875, Actor Loss: -16619.862915039062
Episode 5593: Time: 0.3124065399169922, Total Reward: 257.56153547796055, Q Loss: 424392.50634765625, Actor Loss: -36322.8798828125
Episode 5594: Time: 0.6976401805877686, Total Reward: 593.7550445064995, Q Loss: 854740.5224609375, Actor Loss: -81753.13671875
Episode 5595: Time: 0.2903614044189453, Total Reward: 239.21437640311746, Q Loss: 413893.68017578125, Actor Loss: -33766.3486328125
Episode 5596: Time: 0.11849713325500488, Total Reward: 91.12567579961113, Q Loss: 165357.25146484375, Actor Loss: -13634.147705078125
Episode 5597: Time: 0.14026141166687012, Total Reward: 110.22769523980939, Q Loss: 177252.41748046875, Actor Loss: -16388.691528320312
Episode 5598: Time: 0.25785183906555176, Total Reward: 211.89210769171277, Q Loss: 313560.89013671875, Actor Loss: -29580.971801757812
Episode 5599: Time: 0.4187905788421631, Total Reward: 351.6542641623753, Q Loss: 566681.8842773438, Actor Loss: -47821.274353027344
Validation Mean: 9355.137338843817, Validation Std: 0.5773592966274591
saving model

Episode 5600: Time: 0.30335330963134766, Total Reward: 250.21465874943613, Q Loss: 338906.41552734375, Actor Loss: -34084.697021484375
Episode 5601: Time: 0.301241397857666, Total Reward: 249.29791926503808, Q Loss: 358488.28271484375, Actor Loss: -35031.03503417969
Episode 5602: Time: 0.12915730476379395, Total Reward: 100.57373447251564, Q Loss: 178890.6787109375, Actor Loss: -15132.862182617188
Episode 5603: Time: 0.19419026374816895, Total Reward: 155.94190081447312, Q Loss: 263597.21826171875, Actor Loss: -22393.581298828125
Episode 5604: Time: 0.20508646965026855, Total Reward: 166.15178306937975, Q Loss: 335391.59033203125, Actor Loss: -24923.611572265625
Episode 5605: Time: 0.2153761386871338, Total Reward: 174.89901041707597, Q Loss: 280818.787109375, Actor Loss: -25032.465881347656
Episode 5606: Time: 0.763582706451416, Total Reward: 649.0063090356707, Q Loss: 1109627.1293945312, Actor Loss: -89907.59533691406
Episode 5607: Time: 1.0003104209899902, Total Reward: 854.3593416029223, Q Loss: 1404141.685546875, Actor Loss: -114058.27087402344
Episode 5608: Time: 0.2265932559967041, Total Reward: 183.55135558729162, Q Loss: 315122.837890625, Actor Loss: -27013.1728515625
Episode 5609: Time: 0.6568620204925537, Total Reward: 554.5525655487836, Q Loss: 1016402.6479492188, Actor Loss: -76848.7123413086
Episode 5610: Time: 0.21609234809875488, Total Reward: 175.45263147049863, Q Loss: 269258.57958984375, Actor Loss: -25238.614868164062
Episode 5611: Time: 0.34474849700927734, Total Reward: 287.5182389117836, Q Loss: 505123.59130859375, Actor Loss: -40398.25109863281
Episode 5612: Time: 0.2590670585632324, Total Reward: 212.49541287312235, Q Loss: 329244.6516113281, Actor Loss: -30136.759826660156
Episode 5613: Time: 0.2266991138458252, Total Reward: 184.26177399504093, Q Loss: 266293.49658203125, Actor Loss: -25425.039978027344
Episode 5614: Time: 0.8714230060577393, Total Reward: 742.0980873405751, Q Loss: 1122158.3830566406, Actor Loss: -101862.83215332031
Episode 5615: Time: 0.537708044052124, Total Reward: 453.36726300881804, Q Loss: 636560.7275390625, Actor Loss: -62849.93359375
Episode 5616: Time: 0.612699031829834, Total Reward: 518.2469791174931, Q Loss: 880156.3095703125, Actor Loss: -71502.46508789062
Episode 5617: Time: 0.17209577560424805, Total Reward: 136.44096849239634, Q Loss: 260188.44018554688, Actor Loss: -19669.676208496094
Episode 5618: Time: 0.08676600456237793, Total Reward: 63.10313941641183, Q Loss: 117762.1396484375, Actor Loss: -10571.206420898438
Episode 5619: Time: 0.1292567253112793, Total Reward: 100.80306402123678, Q Loss: 178521.4853515625, Actor Loss: -15373.65576171875
Episode 5620: Time: 0.2270336151123047, Total Reward: 184.5789844487633, Q Loss: 305220.8544921875, Actor Loss: -27475.61767578125
Episode 5621: Time: 0.25962400436401367, Total Reward: 211.87194194565652, Q Loss: 376193.4033203125, Actor Loss: -31088.399780273438
Episode 5622: Time: 0.2159581184387207, Total Reward: 175.28133358061885, Q Loss: 216652.08203125, Actor Loss: -24587.014221191406
Episode 5623: Time: 0.41976165771484375, Total Reward: 352.0094999970042, Q Loss: 677365.8969726562, Actor Loss: -49225.39208984375
Episode 5624: Time: 0.18317580223083496, Total Reward: 146.73003683594612, Q Loss: 274958.16650390625, Actor Loss: -21034.846313476562
Episode 5625: Time: 0.7746217250823975, Total Reward: 660.3614278334533, Q Loss: 1116761.6245117188, Actor Loss: -92071.28576660156
Episode 5626: Time: 0.5699863433837891, Total Reward: 482.6097384365758, Q Loss: 747998.2897949219, Actor Loss: -67503.77209472656
Episode 5627: Time: 0.5052230358123779, Total Reward: 425.109437063088, Q Loss: 656845.2153320312, Actor Loss: -60296.88513183594

Episode 5628: Time: 0.2265634536743164, Total Reward: 184.59363927046203, Q Loss: 347971.513671875, Actor Loss: -27300.609741210938
Episode 5629: Time: 0.14017677307128906, Total Reward: 110.0468562582724, Q Loss: 200435.037109375, Actor Loss: -16469.419189453125
Episode 5630: Time: 0.40860772132873535, Total Reward: 339.0953913495617, Q Loss: 621163.2758789062, Actor Loss: -49449.514404296875
Episode 5631: Time: 0.19365143775939941, Total Reward: 156.78832369304095, Q Loss: 298442.2666015625, Actor Loss: -23215.81591796875
Episode 5632: Time: 0.6557414531707764, Total Reward: 557.0795618655183, Q Loss: 1044623.482421875, Actor Loss: -78566.27313232422
Episode 5633: Time: 0.22663593292236328, Total Reward: 184.65475157448267, Q Loss: 304083.2138671875, Actor Loss: -27407.74462890625
Episode 5634: Time: 0.11878275871276855, Total Reward: 91.14978101072673, Q Loss: 162294.96875, Actor Loss: -13804.65771484375
Episode 5635: Time: 0.10808634757995605, Total Reward: 82.26124012183767, Q Loss: 168364.14453125, Actor Loss: -12529.813842773438
Episode 5636: Time: 0.23783349990844727, Total Reward: 192.10585636636475, Q Loss: 347752.2722167969, Actor Loss: -28109.113037109375
Episode 5637: Time: 0.3452115058898926, Total Reward: 286.23480596581845, Q Loss: 439716.208984375, Actor Loss: -41929.0517578125
Episode 5638: Time: 0.20523715019226074, Total Reward: 165.58922231461682, Q Loss: 306201.74609375, Actor Loss: -24777.765869140625
Episode 5639: Time: 0.29129791259765625, Total Reward: 239.2471802907601, Q Loss: 399704.33203125, Actor Loss: -34659.59814453125
Episode 5640: Time: 0.40934181213378906, Total Reward: 340.5312047042479, Q Loss: 626679.3784179688, Actor Loss: -48802.650146484375
Episode 5641: Time: 0.21591973304748535, Total Reward: 175.5648645103992, Q Loss: 279966.892578125, Actor Loss: -26688.231201171875
Episode 5642: Time: 0.10808777809143066, Total Reward: 82.0574265134612, Q Loss: 141031.72143554688, Actor Loss: -12367.030517578125
Episode 5643: Time: 0.24836969375610352, Total Reward: 203.2794015454662, Q Loss: 345600.009765625, Actor Loss: -29435.390380859375
Episode 5644: Time: 0.17287564277648926, Total Reward: 137.2311456590218, Q Loss: 218914.46484375, Actor Loss: -20251.416625976562
Episode 5645: Time: 0.387941837310791, Total Reward: 324.54315956525716, Q Loss: 619388.5888671875, Actor Loss: -47563.52624511719
Episode 5646: Time: 0.17262744903564453, Total Reward: 137.35320728947667, Q Loss: 198234.9033203125, Actor Loss: -20609.805053710938
Episode 5647: Time: 0.0869603157043457, Total Reward: 63.76939698469123, Q Loss: 103203.1435546875, Actor Loss: -10935.241821289062
Episode 5648: Time: 0.4204542636871338, Total Reward: 351.7542563692005, Q Loss: 596330.2446289062, Actor Loss: -49793.112548828125
Episode 5649: Time: 0.22662949562072754, Total Reward: 184.3921043246879, Q Loss: 365290.0498046875, Actor Loss: -26625.99298095703
Episode 5650: Time: 0.30220746994018555, Total Reward: 248.44157596726853, Q Loss: 389863.2978515625, Actor Loss: -36162.62316894531
Episode 5651: Time: 0.28107118606567383, Total Reward: 228.7327686772796, Q Loss: 407005.1845703125, Actor Loss: -34424.540283203125
Episode 5652: Time: 0.34571337699890137, Total Reward: 286.5256934654223, Q Loss: 514506.20263671875, Actor Loss: -42508.03234863281
Episode 5653: Time: 0.3885059356689453, Total Reward: 323.8622840529961, Q Loss: 581556.1201171875, Actor Loss: -47942.61950683594
Episode 5654: Time: 0.45398426055908203, Total Reward: 379.2443103748602, Q Loss: 642108.8959960938, Actor Loss: -52969.32049560547
Episode 5655: Time: 0.16193222999572754, Total Reward: 128.53072150726348, Q Loss: 173449.52197265625, Actor Loss: -20111.434326171875

Episode 5656: Time: 0.35587120056152344, Total Reward: 293.8670851893945, Q Loss: 526941.7739257812, Actor Loss: -42522.28259277344
Episode 5657: Time: 0.4962882995605469, Total Reward: 415.9373685244996, Q Loss: 732767.29296875, Actor Loss: -59512.41711425781
Episode 5658: Time: 0.31337976455688477, Total Reward: 258.4267589429594, Q Loss: 420686.50146484375, Actor Loss: -37646.1064453125
Episode 5659: Time: 0.2696363925933838, Total Reward: 221.06438984764128, Q Loss: 449745.37060546875, Actor Loss: -32102.842529296875
Episode 5660: Time: 0.2912259101867676, Total Reward: 238.51847550851474, Q Loss: 365522.7014160156, Actor Loss: -35953.396484375
Episode 5661: Time: 0.39874696731567383, Total Reward: 333.44518968510323, Q Loss: 635983.4921875, Actor Loss: -47876.9140625
Episode 5662: Time: 0.17262649536132812, Total Reward: 137.42588169574086, Q Loss: 297569.61767578125, Actor Loss: -20925.637573242188
Episode 5663: Time: 0.1084585189819336, Total Reward: 81.74476623050714, Q Loss: 190929.111328125, Actor Loss: -13421.066284179688
Episode 5664: Time: 0.6141955852508545, Total Reward: 518.644684593874, Q Loss: 988945.4672851562, Actor Loss: -74300.47064208984
Episode 5665: Time: 0.08679342269897461, Total Reward: 63.396053944530045, Q Loss: 124767.90234375, Actor Loss: -9833.1953125
Episode 5666: Time: 0.34505224227905273, Total Reward: 286.0528594463142, Q Loss: 476093.00390625, Actor Loss: -43167.13098144531
Episode 5667: Time: 0.4536933898925781, Total Reward: 379.17059594758746, Q Loss: 567540.0610351562, Actor Loss: -54829.01416015625
Episode 5668: Time: 0.22668957710266113, Total Reward: 184.20687333136405, Q Loss: 251647.05126953125, Actor Loss: -28263.902221679688
Episode 5669: Time: 0.5172884464263916, Total Reward: 435.90676600378197, Q Loss: 698041.0146484375, Actor Loss: -61609.459228515625
Episode 5670: Time: 0.2918388843536377, Total Reward: 240.34885778495058, Q Loss: 442717.79248046875, Actor Loss: -34877.99987792969
Episode 5671: Time: 0.29131102561950684, Total Reward: 240.69955000239295, Q Loss: 362251.07666015625, Actor Loss: -35754.482666015625
Episode 5672: Time: 0.592198371887207, Total Reward: 499.50904418677925, Q Loss: 856863.3969726562, Actor Loss: -73234.6884765625
Episode 5673: Time: 0.12952423095703125, Total Reward: 101.14293123917065, Q Loss: 208791.1240234375, Actor Loss: -15555.00341796875
Episode 5674: Time: 0.28093695640563965, Total Reward: 229.15278169719787, Q Loss: 439802.0234375, Actor Loss: -34613.95397949219
Episode 5675: Time: 0.1617586612701416, Total Reward: 128.34111782774647, Q Loss: 216915.2587890625, Actor Loss: -19068.947265625
Episode 5676: Time: 0.0976250171661377, Total Reward: 72.16400444335875, Q Loss: 166589.27197265625, Actor Loss: -12085.606079101562
Episode 5677: Time: 0.30210256576538086, Total Reward: 249.5341506700451, Q Loss: 416165.89111328125, Actor Loss: -36100.35632324219
Episode 5678: Time: 0.23794150352478027, Total Reward: 193.060166402469, Q Loss: 366180.0661621094, Actor Loss: -29367.024780273438
Episode 5679: Time: 0.2055802345275879, Total Reward: 163.3931924966146, Q Loss: 277451.5812988281, Actor Loss: -25045.629150390625
Episode 5680: Time: 0.12940144538879395, Total Reward: 100.45258775960087, Q Loss: 160992.3681640625, Actor Loss: -16082.963256835938
Episode 5681: Time: 0.19452619552612305, Total Reward: 156.2108600741993, Q Loss: 300597.09814453125, Actor Loss: -22865.0595703125
Episode 5682: Time: 0.4851970672607422, Total Reward: 408.7906751137314, Q Loss: 821212.6669921875, Actor Loss: -58570.96105957031
Episode 5683: Time: 0.1727128028869629, Total Reward: 137.21255850881644, Q Loss: 221381.89306640625, Actor Loss: -19887.26983642578

Episode 5684: Time: 0.31304430961608887, Total Reward: 257.7410864583777, Q Loss: 539923.5297851562, Actor Loss: -37395.2333984375
Episode 5685: Time: 0.23792052268981934, Total Reward: 191.24941043078474, Q Loss: 383656.1064453125, Actor Loss: -28605.073486328125
Episode 5686: Time: 0.259052038192749, Total Reward: 212.18149731794927, Q Loss: 414153.00732421875, Actor Loss: -31605.310302734375
Episode 5687: Time: 0.18335533142089844, Total Reward: 145.75082869871432, Q Loss: 319579.0625, Actor Loss: -22617.333862304688
Episode 5688: Time: 0.24819159507751465, Total Reward: 202.92818935111168, Q Loss: 442234.76171875, Actor Loss: -30277.028930664062
Episode 5689: Time: 0.09723973274230957, Total Reward: 72.19774098430217, Q Loss: 153802.13916015625, Actor Loss: -12325.549682617188
Episode 5690: Time: 0.34561824798583984, Total Reward: 285.5080009862202, Q Loss: 509268.14111328125, Actor Loss: -41740.085388183594
Episode 5691: Time: 0.3877096176147461, Total Reward: 322.75722011780556, Q Loss: 645872.4853515625, Actor Loss: -49403.95739746094
Episode 5692: Time: 0.7322089672088623, Total Reward: 623.4583109138828, Q Loss: 1098933.6064453125, Actor Loss: -89231.904296875
Episode 5693: Time: 0.14035367965698242, Total Reward: 109.73554011760942, Q Loss: 223908.01416015625, Actor Loss: -17040.381591796875
Episode 5694: Time: 0.29117727279663086, Total Reward: 237.24674641150355, Q Loss: 432820.443359375, Actor Loss: -36532.488037109375
Episode 5695: Time: 0.323223352432251, Total Reward: 268.2952452393504, Q Loss: 563707.296875, Actor Loss: -40640.10974121094
Episode 5696: Time: 0.6027092933654785, Total Reward: 511.1737009282312, Q Loss: 905117.8549804688, Actor Loss: -74422.99328613281
Episode 5697: Time: 0.334104061126709, Total Reward: 277.39655472164236, Q Loss: 435401.1943359375, Actor Loss: -40492.561279296875
Episode 5698: Time: 0.4196290969848633, Total Reward: 352.06207893560514, Q Loss: 675903.1135253906, Actor Loss: -51835.61535644531
Episode 5699: Time: 0.1293950080871582, Total Reward: 100.95016342556136, Q Loss: 179023.0205078125, Actor Loss: -15587.857543945312
Validation Mean: 9355.167536461315, Validation Std: 0.5675391908221183
saving model
Episode 5700: Time: 0.33652663230895996, Total Reward: 277.01569522558583, Q Loss: 466253.2687988281, Actor Loss: -40012.08581542969
Episode 5701: Time: 0.5712621212005615, Total Reward: 482.49558011528245, Q Loss: 925406.4130859375, Actor Loss: -71627.77722167969
Episode 5702: Time: 0.2482297420501709, Total Reward: 202.36552672453016, Q Loss: 282235.6982421875, Actor Loss: -31136.421020507812
Episode 5703: Time: 0.2268204689025879, Total Reward: 183.48490011394279, Q Loss: 348453.177734375, Actor Loss: -28387.410522460938
Episode 5704: Time: 0.8932709693908691, Total Reward: 759.4603951666612, Q Loss: 1294134.1027832031, Actor Loss: -111580.55334472656
Episode 5705: Time: 1.0120270252227783, Total Reward: 864.3542629800609, Q Loss: 1541218.5632324219, Actor Loss: -126422.2056274414
Episode 5706: Time: 0.18320250511169434, Total Reward: 147.42823628476904, Q Loss: 256552.97509765625, Actor Loss: -22042.282836914062
Episode 5707: Time: 0.40925145149230957, Total Reward: 342.62852851099717, Q Loss: 575032.2099609375, Actor Loss: -50657.4052734375
Episode 5708: Time: 0.24792170524597168, Total Reward: 202.4232459427678, Q Loss: 402696.44921875, Actor Loss: -32033.023315429688
Episode 5709: Time: 0.281313419342041, Total Reward: 230.94140373986815, Q Loss: 501473.7705078125, Actor Loss: -35742.578857421875
Episode 5710: Time: 0.5276200771331787, Total Reward: 443.3371379514093, Q Loss: 795774.166015625, Actor Loss: -66170.96398925781

Episode 5711: Time: 0.16202306747436523, Total Reward: 126.66272790912436, Q Loss: 239452.40673828125, Actor Loss: -20144.243041992188
Episode 5712: Time: 0.5500857830047607, Total Reward: 460.48698294449036, Q Loss: 857518.63671875, Actor Loss: -67978.58526611328
Episode 5713: Time: 0.23740506172180176, Total Reward: 193.68514016975033, Q Loss: 361207.435546875, Actor Loss: -29695.239868164062
Episode 5714: Time: 0.20548629760742188, Total Reward: 165.80346599917203, Q Loss: 313698.91357421875, Actor Loss: -25610.330932617188
Episode 5715: Time: 0.23816704750061035, Total Reward: 192.43366935586647, Q Loss: 364458.8359375, Actor Loss: -29656.639892578125
Episode 5716: Time: 0.17279791831970215, Total Reward: 138.0666015524722, Q Loss: 319402.68408203125, Actor Loss: -21420.2119140625
Episode 5717: Time: 0.17337632179260254, Total Reward: 138.10233370524338, Q Loss: 275295.49072265625, Actor Loss: -21915.235229492188
Episode 5718: Time: 0.33528757095336914, Total Reward: 276.22484873090616, Q Loss: 573100.8754882812, Actor Loss: -41591.86193847656
Episode 5719: Time: 0.23793363571166992, Total Reward: 193.03726103116668, Q Loss: 310984.634765625, Actor Loss: -30817.418579101562
Episode 5720: Time: 0.23796820640563965, Total Reward: 193.11192279822671, Q Loss: 284887.67626953125, Actor Loss: -29539.40673828125
Episode 5721: Time: 0.29261064529418945, Total Reward: 238.4468506157459, Q Loss: 451513.07470703125, Actor Loss: -36865.30419921875
Episode 5722: Time: 0.22775840759277344, Total Reward: 183.83350692807568, Q Loss: 374372.3505859375, Actor Loss: -29390.512817382812
Episode 5723: Time: 0.14136505126953125, Total Reward: 109.62070681571389, Q Loss: 248194.73876953125, Actor Loss: -17574.749877929688
Episode 5724: Time: 0.19539618492126465, Total Reward: 156.66831793612218, Q Loss: 320609.90625, Actor Loss: -24172.680419921875
Episode 5725: Time: 0.23785901069641113, Total Reward: 194.495198742546, Q Loss: 409752.515625, Actor Loss: -29826.931030273438
Episode 5726: Time: 0.3880753517150879, Total Reward: 322.81735682884414, Q Loss: 604312.462890625, Actor Loss: -48312.19641113281
Episode 5727: Time: 0.5064125061035156, Total Reward: 426.12046067702454, Q Loss: 875931.7983398438, Actor Loss: -62473.727294921875
Episode 5728: Time: 0.5392677783966064, Total Reward: 454.31887011328865, Q Loss: 836494.5415039062, Actor Loss: -67468.73181152344
Episode 5729: Time: 0.25930261611938477, Total Reward: 211.88263558763776, Q Loss: 375849.84912109375, Actor Loss: -32932.60119628906
Episode 5730: Time: 0.6246826648712158, Total Reward: 527.0504148591536, Q Loss: 769493.212890625, Actor Loss: -79379.23315429688
Episode 5731: Time: 0.34497714042663574, Total Reward: 285.73947275599255, Q Loss: 685067.8071289062, Actor Loss: -44602.360107421875
Episode 5732: Time: 0.2267906665802002, Total Reward: 184.12643697664546, Q Loss: 376601.115234375, Actor Loss: -28831.426025390625
Episode 5733: Time: 0.19424080848693848, Total Reward: 155.54131417036558, Q Loss: 278177.31005859375, Actor Loss: -24102.055786132812
Episode 5734: Time: 0.35570764541625977, Total Reward: 297.01125724068623, Q Loss: 592025.3071289062, Actor Loss: -45574.39990234375
Episode 5735: Time: 0.3022801876068115, Total Reward: 250.13197654326171, Q Loss: 564033.1149902344, Actor Loss: -38397.244873046875
Episode 5736: Time: 0.24816608428955078, Total Reward: 202.57508992357955, Q Loss: 435996.224609375, Actor Loss: -31755.668090820312
Episode 5737: Time: 0.2806708812713623, Total Reward: 231.3601876344125, Q Loss: 488061.08251953125, Actor Loss: -35150.593017578125
Episode 5738: Time: 0.3561520576477051, Total Reward: 296.1470035608453, Q Loss: 483489.17626953125, Actor Loss: -45495.30725097656

Episode 5739: Time: 0.4853637218475342, Total Reward: 407.35357109930067, Q Loss: 733768.7563476562, Actor Loss: -62017.48010253906
Episode 5740: Time: 0.5931928157806396, Total Reward: 501.05883739406937, Q Loss: 915007.8549804688, Actor Loss: -76538.62377929688
Episode 5741: Time: 0.20594382286071777, Total Reward: 164.92956672306778, Q Loss: 272864.69482421875, Actor Loss: -26434.126342773438
Episode 5742: Time: 0.5184311866760254, Total Reward: 435.56101280342193, Q Loss: 812034.3530273438, Actor Loss: -66663.04577636719
Episode 5743: Time: 0.30551815032958984, Total Reward: 249.69820552053443, Q Loss: 498081.984375, Actor Loss: -39181.98547363281
Episode 5744: Time: 0.6658616065979004, Total Reward: 548.251251695226, Q Loss: 990560.3505859375, Actor Loss: -82196.09533691406
Episode 5745: Time: 0.42346739768981934, Total Reward: 340.47772238462585, Q Loss: 631562.951171875, Actor Loss: -52622.095703125
Episode 5746: Time: 0.3676340579986572, Total Reward: 296.2220354746972, Q Loss: 520355.2958984375, Actor Loss: -45131.505615234375
Episode 5747: Time: 0.5991156101226807, Total Reward: 501.5734090766569, Q Loss: 1023716.3232421875, Actor Loss: -76136.30981445312
Episode 5748: Time: 0.1408231258392334, Total Reward: 110.18536699210988, Q Loss: 348569.91650390625, Actor Loss: -17776.409057617188
Episode 5749: Time: 0.572983980178833, Total Reward: 481.489109388659, Q Loss: 929918.0053710938, Actor Loss: -73398.83605957031
Episode 5750: Time: 0.2171018123626709, Total Reward: 172.1078427212242, Q Loss: 353613.34228515625, Actor Loss: -27936.79345703125
Episode 5751: Time: 0.3364236354827881, Total Reward: 277.15625377740884, Q Loss: 516919.23681640625, Actor Loss: -42102.52282714844
Episode 5752: Time: 0.08698272705078125, Total Reward: 63.11879653990019, Q Loss: 93521.26708984375, Actor Loss: -11377.439697265625
Episode 5753: Time: 0.22774672508239746, Total Reward: 184.197662393512, Q Loss: 412524.98486328125, Actor Loss: -28989.744140625
Episode 5754: Time: 0.31412672996520996, Total Reward: 259.522710097373, Q Loss: 502427.79736328125, Actor Loss: -40125.57629394531
Episode 5755: Time: 0.26013946533203125, Total Reward: 210.3720830786598, Q Loss: 435401.5712890625, Actor Loss: -33201.13720703125
Episode 5756: Time: 0.20626592636108398, Total Reward: 165.93741626056234, Q Loss: 315564.3720703125, Actor Loss: -27159.026245117188
Episode 5757: Time: 0.18398022651672363, Total Reward: 146.1861256495282, Q Loss: 294439.56005859375, Actor Loss: -24269.815185546875
Episode 5758: Time: 0.21666216850280762, Total Reward: 173.88769984668858, Q Loss: 370627.34765625, Actor Loss: -28210.983764648438
Episode 5759: Time: 0.30320024490356445, Total Reward: 249.5578279165588, Q Loss: 497338.94287109375, Actor Loss: -39333.46520996094
Episode 5760: Time: 0.3894791603088379, Total Reward: 322.87981830116314, Q Loss: 600821.310546875, Actor Loss: -50556.2109375
Episode 5761: Time: 0.3563568592071533, Total Reward: 296.23329970724683, Q Loss: 583592.15625, Actor Loss: -45549.79895019531
Episode 5762: Time: 0.5612082481384277, Total Reward: 472.69898802661515, Q Loss: 1022390.1767578125, Actor Loss: -71953.90966796875
Episode 5763: Time: 0.28099918365478516, Total Reward: 230.3216590855654, Q Loss: 530336.119140625, Actor Loss: -35950.452392578125
Episode 5764: Time: 0.12987875938415527, Total Reward: 100.02335788018937, Q Loss: 181937.08544921875, Actor Loss: -17193.531372070312
Episode 5765: Time: 0.37787675857543945, Total Reward: 313.3038153465681, Q Loss: 745885.6796875, Actor Loss: -48433.29650878906
Episode 5766: Time: 0.7236077785491943, Total Reward: 613.1370907042758, Q Loss: 1238520.7951660156, Actor Loss: -93172.08093261719

Episode 5767: Time: 0.6487116813659668, Total Reward: 545.6626905695929, Q Loss: 1198142.0561523438, Actor Loss: -84674.01953125
Episode 5768: Time: 0.36781764030456543, Total Reward: 304.50038775212045, Q Loss: 598045.4809570312, Actor Loss: -47079.26892089844
Episode 5769: Time: 0.4317045211791992, Total Reward: 361.12504338412816, Q Loss: 878217.3872070312, Actor Loss: -56524.25231933594
Episode 5770: Time: 0.24839353561401367, Total Reward: 203.00080226183513, Q Loss: 408221.0061035156, Actor Loss: -32320.765014648438
Episode 5771: Time: 0.1297907829284668, Total Reward: 100.66569438279964, Q Loss: 208796.4306640625, Actor Loss: -16920.513671875
Episode 5772: Time: 0.2806260585784912, Total Reward: 230.39963573872996, Q Loss: 471977.28662109375, Actor Loss: -36564.43603515625
Episode 5773: Time: 0.5713038444519043, Total Reward: 480.63289531875904, Q Loss: 847564.5639648438, Actor Loss: -74827.56066894531
Episode 5774: Time: 0.3990614414215088, Total Reward: 333.5485483307348, Q Loss: 646368.677734375, Actor Loss: -52270.66735839844
Episode 5775: Time: 0.1617906093597412, Total Reward: 128.61062842665416, Q Loss: 294757.93115234375, Actor Loss: -21981.735717773438
Episode 5776: Time: 0.5709385871887207, Total Reward: 481.76053575033967, Q Loss: 983247.6611328125, Actor Loss: -73293.13818359375
Episode 5777: Time: 0.11898994445800781, Total Reward: 91.06094978058798, Q Loss: 238542.6962890625, Actor Loss: -15611.666137695312
Episode 5778: Time: 0.3230888843536377, Total Reward: 268.2028094243638, Q Loss: 545786.4389648438, Actor Loss: -42639.77734375
Episode 5779: Time: 0.5719864368438721, Total Reward: 479.370931738181, Q Loss: 1053161.9921875, Actor Loss: -74913.45495605469
Episode 5780: Time: 0.10902094841003418, Total Reward: 82.43172904750018, Q Loss: 160121.9111328125, Actor Loss: -13788.2314453125
Episode 5781: Time: 0.19514751434326172, Total Reward: 156.41940404327667, Q Loss: 301513.5310058594, Actor Loss: -25045.887451171875
Episode 5782: Time: 0.46387577056884766, Total Reward: 389.6126936300525, Q Loss: 877441.396484375, Actor Loss: -61394.384033203125
Episode 5783: Time: 0.3777477741241455, Total Reward: 314.11152421060115, Q Loss: 570394.0590820312, Actor Loss: -48542.6845703125
Episode 5784: Time: 0.1298961639404297, Total Reward: 100.21996267301627, Q Loss: 253273.3642578125, Actor Loss: -16074.681396484375
Episode 5785: Time: 0.19470787048339844, Total Reward: 155.33097425182234, Q Loss: 350953.48486328125, Actor Loss: -25060.2880859375
Episode 5786: Time: 0.22697973251342773, Total Reward: 182.57201827467944, Q Loss: 436078.14111328125, Actor Loss: -30093.250610351562
Episode 5787: Time: 0.2809758186340332, Total Reward: 230.91996827673114, Q Loss: 528240.3735351562, Actor Loss: -35402.12561035156
Episode 5788: Time: 0.16184473037719727, Total Reward: 128.53002893869242, Q Loss: 272358.775390625, Actor Loss: -20798.926635742188
Episode 5789: Time: 0.1944117546081543, Total Reward: 156.65338014190888, Q Loss: 351653.29150390625, Actor Loss: -25329.602661132812
Episode 5790: Time: 0.32396888732910156, Total Reward: 265.69401928807866, Q Loss: 514662.30078125, Actor Loss: -43133.804931640625
Episode 5791: Time: 0.19424748420715332, Total Reward: 156.07739890476836, Q Loss: 313170.0986328125, Actor Loss: -26029.099609375
Episode 5792: Time: 0.376880407333374, Total Reward: 313.288278712172, Q Loss: 560398.1796875, Actor Loss: -49870.13513183594
Episode 5793: Time: 0.20521259307861328, Total Reward: 163.8981565017211, Q Loss: 319131.54736328125, Actor Loss: -26124.225341796875
Episode 5794: Time: 0.09708714485168457, Total Reward: 72.70915215001514, Q Loss: 153466.91943359375, Actor Loss: -12748.027954101562

Episode 5795: Time: 0.5488827228546143, Total Reward: 463.17576398787406, Q Loss: 891281.1826171875, Actor Loss: -73033.31896972656
Episode 5796: Time: 0.31224489212036133, Total Reward: 258.3272234523065, Q Loss: 519335.1501464844, Actor Loss: -40953.924072265625
Episode 5797: Time: 0.5798115730285645, Total Reward: 490.6044535852885, Q Loss: 979623.0874023438, Actor Loss: -75906.25085449219
Episode 5798: Time: 0.19396328926086426, Total Reward: 156.26236951098025, Q Loss: 332618.71240234375, Actor Loss: -25752.760986328125
Episode 5799: Time: 0.4191725254058838, Total Reward: 352.54766461538776, Q Loss: 834719.0795898438, Actor Loss: -55985.4208984375
Validation Mean: 9355.122846178514, Validation Std: 0.2585436147660395
saving model
Episode 5800: Time: 0.07184910774230957, Total Reward: 63.177434565477014, Q Loss: 192093.6455078125, Actor Loss: -12007.380859375
Episode 5801: Time: 0.12482929229736328, Total Reward: 119.04691285320199, Q Loss: 372328.6806640625, Actor Loss: -20127.17529296875
Episode 5802: Time: 0.17672944068908691, Total Reward: 175.3991609748038, Q Loss: 404898.3349609375, Actor Loss: -28551.964477539062
Episode 5803: Time: 0.44992828369140625, Total Reward: 463.8514211338288, Q Loss: 1058495.1098632812, Actor Loss: -74224.53564453125
Episode 5804: Time: 0.2383415699005127, Total Reward: 237.40565014405797, Q Loss: 501516.29150390625, Actor Loss: -39122.969970703125
Episode 5805: Time: 0.4317195415496826, Total Reward: 443.5191988097283, Q Loss: 967091.2045898438, Actor Loss: -69899.77062988281
Episode 5806: Time: 0.10603952407836914, Total Reward: 100.23567952456247, Q Loss: 233561.548828125, Actor Loss: -16612.029174804688
Episode 5807: Time: 0.17725849151611328, Total Reward: 174.52258854739983, Q Loss: 412719.8759765625, Actor Loss: -29122.945678710938
Episode 5808: Time: 0.46648478507995605, Total Reward: 481.66482706988495, Q Loss: 1012972.1611328125, Actor Loss: -75767.07019042969
Episode 5809: Time: 0.07063674926757812, Total Reward: 62.82161744786921, Q Loss: 175644.626953125, Actor Loss: -11285.713745117188
Episode 5810: Time: 0.21241307258605957, Total Reward: 212.9766847586499, Q Loss: 481152.7451171875, Actor Loss: -34144.99499511719
Episode 5811: Time: 0.1761934757232666, Total Reward: 175.53651682352194, Q Loss: 502579.23046875, Actor Loss: -28481.93115234375
Episode 5812: Time: 0.563093900680542, Total Reward: 584.4476846066761, Q Loss: 1306871.501953125, Actor Loss: -93680.43212890625
Episode 5813: Time: 0.6256980895996094, Total Reward: 646.4933283783215, Q Loss: 1414436.6279296875, Actor Loss: -101042.66760253906
Episode 5814: Time: 0.27425169944763184, Total Reward: 276.3930785135556, Q Loss: 558344.3466796875, Actor Loss: -43958.18444824219
Episode 5815: Time: 0.5303335189819336, Total Reward: 547.0277697042852, Q Loss: 1128048.2182617188, Actor Loss: -86597.47302246094
Episode 5816: Time: 0.16799354553222656, Total Reward: 162.45692419397488, Q Loss: 414034.26708984375, Actor Loss: -27544.187866210938
Episode 5817: Time: 0.15069031715393066, Total Reward: 147.1801291363498, Q Loss: 285056.443359375, Actor Loss: -23793.69775390625
Episode 5818: Time: 0.43264245986938477, Total Reward: 445.58161511914636, Q Loss: 967187.8920898438, Actor Loss: -71410.70520019531
Episode 5819: Time: 0.10660648345947266, Total Reward: 100.96925967152485, Q Loss: 262902.4375, Actor Loss: -17684.082885742188
Episode 5820: Time: 0.22110557556152344, Total Reward: 221.85012694798556, Q Loss: 515987.9365234375, Actor Loss: -36670.32067871094
Episode 5821: Time: 0.27402639389038086, Total Reward: 274.9204511200256, Q Loss: 596567.6806640625, Actor Loss: -45335.33935546875

Episode 5822: Time: 0.4410853385925293, Total Reward: 453.992235481702, Q Loss: 1069467.7109375, Actor Loss: -72553.11584472656
Episode 5823: Time: 0.24678325653076172, Total Reward: 249.89357786864485, Q Loss: 555829.791015625, Actor Loss: -41307.38134765625
Episode 5824: Time: 0.300966739654541, Total Reward: 304.1960504845359, Q Loss: 650561.2778320312, Actor Loss: -50838.30615234375
Episode 5825: Time: 0.13237714767456055, Total Reward: 128.78345659922226, Q Loss: 321418.607421875, Actor Loss: -22185.225952148438
Episode 5826: Time: 0.07983970642089844, Total Reward: 72.52316902520263, Q Loss: 167590.43212890625, Actor Loss: -12765.568359375
Episode 5827: Time: 0.15003204345703125, Total Reward: 147.18723338541767, Q Loss: 328915.9697265625, Actor Loss: -23563.244018554688
Episode 5828: Time: 0.18518948554992676, Total Reward: 183.68269430570288, Q Loss: 442213.25048828125, Actor Loss: -31065.808349609375
Episode 5829: Time: 0.13240671157836914, Total Reward: 127.43734845280713, Q Loss: 326579.892578125, Actor Loss: -21590.527709960938
Episode 5830: Time: 0.19407439231872559, Total Reward: 193.18665831194673, Q Loss: 423164.564453125, Actor Loss: -31158.812866210938
Episode 5831: Time: 0.4056828022003174, Total Reward: 415.6528305191956, Q Loss: 1158213.7153320312, Actor Loss: -67548.65185546875
Episode 5832: Time: 0.22920799255371094, Total Reward: 229.321070355543, Q Loss: 542301.2651367188, Actor Loss: -37924.38024902344
Episode 5833: Time: 0.2820553779602051, Total Reward: 285.8722713587223, Q Loss: 666721.390625, Actor Loss: -45934.908203125
Episode 5834: Time: 0.26499485969543457, Total Reward: 267.9085187088189, Q Loss: 695322.3125, Actor Loss: -43698.06103515625
Episode 5835: Time: 0.352550745010376, Total Reward: 361.3502038923394, Q Loss: 675890.7375488281, Actor Loss: -58075.5986328125
Episode 5836: Time: 0.20455694198608398, Total Reward: 202.08943023208633, Q Loss: 339454.72119140625, Actor Loss: -33650.874755859375
Episode 5837: Time: 0.24698734283447266, Total Reward: 248.16233095460547, Q Loss: 613649.2905273438, Actor Loss: -40835.18981933594
Episode 5838: Time: 0.28200650215148926, Total Reward: 287.18638154526025, Q Loss: 621682.0424804688, Actor Loss: -47335.745849609375
Episode 5839: Time: 0.18531584739685059, Total Reward: 184.23597272587816, Q Loss: 408587.7587890625, Actor Loss: -30853.03564453125
Episode 5840: Time: 0.1854393482208252, Total Reward: 184.4462706919885, Q Loss: 400667.212890625, Actor Loss: -30989.648681640625
Episode 5841: Time: 0.06218862533569336, Total Reward: 53.256206562363225, Q Loss: 212505.98388671875, Actor Loss: -10420.268432617188
Episode 5842: Time: 0.7480576038360596, Total Reward: 779.9472810913819, Q Loss: 1729484.1018066406, Actor Loss: -125977.27563476562
Episode 5843: Time: 0.2995738983154297, Total Reward: 305.11456152477234, Q Loss: 633790.8984375, Actor Loss: -50211.439697265625
Episode 5844: Time: 0.09735655784606934, Total Reward: 91.6070684039709, Q Loss: 273121.00390625, Actor Loss: -16242.05810546875
Episode 5845: Time: 0.22105813026428223, Total Reward: 221.24843220708897, Q Loss: 502286.16259765625, Actor Loss: -36346.52087402344
Episode 5846: Time: 0.2119309902191162, Total Reward: 210.21015695856178, Q Loss: 437477.6865234375, Actor Loss: -34703.135009765625
Episode 5847: Time: 0.4588165283203125, Total Reward: 471.3316337475098, Q Loss: 930014.4150390625, Actor Loss: -76630.52734375
Episode 5848: Time: 0.0883643627166748, Total Reward: 81.37108907670383, Q Loss: 254223.1982421875, Actor Loss: -14417.460815429688
Episode 5849: Time: 0.4402618408203125, Total Reward: 453.6660906683966, Q Loss: 1044661.287109375, Actor Loss: -72824.56665039062

Episode 5850: Time: 0.19389104843139648, Total Reward: 193.94307612529494, Q Loss: 444083.07373046875, Actor Loss: -31750.638305664062
Episode 5851: Time: 0.08856344223022461, Total Reward: 81.78296302402389, Q Loss: 169899.90283203125, Actor Loss: -14140.094360351562
Episode 5852: Time: 0.28200483322143555, Total Reward: 285.0665698501091, Q Loss: 668192.6635742188, Actor Loss: -46636.95251464844
Episode 5853: Time: 0.2902076244354248, Total Reward: 296.9222647918541, Q Loss: 627683.2763671875, Actor Loss: -50082.74133300781
Episode 5854: Time: 0.32672834396362305, Total Reward: 332.5211995524305, Q Loss: 751989.9614257812, Actor Loss: -55202.05114746094
Episode 5855: Time: 0.11494183540344238, Total Reward: 109.28494874363507, Q Loss: 291915.9482421875, Actor Loss: -19328.87158203125
Episode 5856: Time: 0.14230632781982422, Total Reward: 137.68299366448943, Q Loss: 299671.61669921875, Actor Loss: -23882.768310546875
Episode 5857: Time: 0.2996699810028076, Total Reward: 304.80652518982885, Q Loss: 668307.365234375, Actor Loss: -51873.17321777344
Episode 5858: Time: 0.08876848220825195, Total Reward: 81.67594562590537, Q Loss: 208378.00439453125, Actor Loss: -15310.0048828125
Episode 5859: Time: 0.07084965705871582, Total Reward: 63.065216200464675, Q Loss: 176463.048828125, Actor Loss: -12145.72802734375
Episode 5860: Time: 0.35344719886779785, Total Reward: 362.314467764961, Q Loss: 888807.4140625, Actor Loss: -57220.754150390625
Episode 5861: Time: 0.4692080020904541, Total Reward: 483.29664987739363, Q Loss: 934909.8715820312, Actor Loss: -77794.92065429688
Episode 5862: Time: 0.33660244941711426, Total Reward: 340.06459164781376, Q Loss: 839426.8999023438, Actor Loss: -58016.92541503906
Episode 5863: Time: 0.24782848358154297, Total Reward: 249.51017454185143, Q Loss: 612058.6713867188, Actor Loss: -41023.54833984375
Episode 5864: Time: 0.11524510383605957, Total Reward: 109.34339624426788, Q Loss: 163008.28466796875, Actor Loss: -18640.640869140625
Episode 5865: Time: 0.1859123706817627, Total Reward: 184.33806315465134, Q Loss: 474885.9111328125, Actor Loss: -30279.067016601562
Episode 5866: Time: 0.2908356189727783, Total Reward: 293.52424213336155, Q Loss: 728280.396484375, Actor Loss: -48451.26794433594
Episode 5867: Time: 0.14081740379333496, Total Reward: 137.91620222895594, Q Loss: 291498.63525390625, Actor Loss: -23652.358276367188
Episode 5868: Time: 0.16731762886047363, Total Reward: 165.65806989416248, Q Loss: 454590.51416015625, Actor Loss: -28280.7265625
Episode 5869: Time: 0.15862798690795898, Total Reward: 156.54529493538718, Q Loss: 385893.45556640625, Actor Loss: -25717.57470703125
Episode 5870: Time: 0.14162945747375488, Total Reward: 137.59758512146726, Q Loss: 329410.03759765625, Actor Loss: -24343.288696289062
Episode 5871: Time: 0.07955002784729004, Total Reward: 72.56824267715074, Q Loss: 208635.970703125, Actor Loss: -14398.17431640625
Episode 5872: Time: 0.18516874313354492, Total Reward: 182.83162696232137, Q Loss: 396266.90966796875, Actor Loss: -31570.196655273438
Episode 5873: Time: 0.46737027168273926, Total Reward: 480.19372212315625, Q Loss: 1034508.5688476562, Actor Loss: -79527.89172363281
Episode 5874: Time: 0.25616908073425293, Total Reward: 259.01467124439336, Q Loss: 707655.6616210938, Actor Loss: -44585.64318847656
Episode 5875: Time: 0.09684371948242188, Total Reward: 91.73242039526046, Q Loss: 223761.513671875, Actor Loss: -15940.913452148438
Episode 5876: Time: 0.22043657302856445, Total Reward: 220.38448529439515, Q Loss: 702569.37890625, Actor Loss: -37836.938720703125
Episode 5877: Time: 0.18509221076965332, Total Reward: 185.33988904293795, Q Loss: 430139.43212890625, Actor Loss: -31195.912231445312

Episode 5878: Time: 0.1060795783996582, Total Reward: 100.34853007090965, Q Loss: 367402.412109375, Actor Loss: -18122.989135742188
Episode 5879: Time: 0.29152750968933105, Total Reward: 296.92555038252584, Q Loss: 718880.6557617188, Actor Loss: -47539.4990234375
Episode 5880: Time: 0.21185803413391113, Total Reward: 212.20570873482308, Q Loss: 529525.615234375, Actor Loss: -34662.76159667969
Episode 5881: Time: 0.38507509231567383, Total Reward: 388.92615581692985, Q Loss: 841666.9682617188, Actor Loss: -63659.83581542969
Episode 5882: Time: 0.21228241920471191, Total Reward: 211.96097479645957, Q Loss: 604913.263671875, Actor Loss: -36215.87609863281
Episode 5883: Time: 0.1331171989440918, Total Reward: 128.87882841845655, Q Loss: 209085.59765625, Actor Loss: -22134.398193359375
Episode 5884: Time: 0.13324737548828125, Total Reward: 127.90685083614761, Q Loss: 311338.087890625, Actor Loss: -22111.859008789062
Episode 5885: Time: 0.09730696678161621, Total Reward: 91.59320670274097, Q Loss: 170276.5107421875, Actor Loss: -16214.7939453125
Episode 5886: Time: 0.5820024013519287, Total Reward: 604.3362931309596, Q Loss: 1380488.9990234375, Actor Loss: -99522.9248046875
Episode 5887: Time: 0.41478586196899414, Total Reward: 426.55766555789427, Q Loss: 987351.9663085938, Actor Loss: -70930.56298828125
Episode 5888: Time: 0.33617234230041504, Total Reward: 341.38130977837346, Q Loss: 754240.4072265625, Actor Loss: -56627.71887207031
Episode 5889: Time: 0.39766550064086914, Total Reward: 407.5992997542907, Q Loss: 1065531.3115234375, Actor Loss: -66946.609375
Episode 5890: Time: 0.3000311851501465, Total Reward: 305.6559275506086, Q Loss: 744898.2768554688, Actor Loss: -51062.428955078125
Episode 5891: Time: 0.10602998733520508, Total Reward: 100.0271187187359, Q Loss: 222320.13671875, Actor Loss: -18012.310424804688
Episode 5892: Time: 0.18557500839233398, Total Reward: 180.68752373176966, Q Loss: 370266.443359375, Actor Loss: -32257.056884765625
Episode 5893: Time: 0.22950077056884766, Total Reward: 231.0176645396909, Q Loss: 597789.3129882812, Actor Loss: -39293.723876953125
Episode 5894: Time: 0.617450475692749, Total Reward: 640.3165564507085, Q Loss: 1394706.5283203125, Actor Loss: -105795.42700195312
Episode 5895: Time: 0.1499629020690918, Total Reward: 147.74533284240226, Q Loss: 382443.44140625, Actor Loss: -26058.122680664062
Episode 5896: Time: 0.38030457496643066, Total Reward: 388.3242086072729, Q Loss: 859042.1352539062, Actor Loss: -64996.365478515625
Episode 5897: Time: 0.07989287376403809, Total Reward: 72.73072688960991, Q Loss: 154450.58203125, Actor Loss: -13442.16845703125
Episode 5898: Time: 0.5108551979064941, Total Reward: 526.4988564395501, Q Loss: 994359.7822265625, Actor Loss: -86995.62915039062
Episode 5899: Time: 0.22040939331054688, Total Reward: 221.5793724417488, Q Loss: 600439.5341796875, Actor Loss: -37680.843994140625
Validation Mean: 9355.537929468917, Validation Std: 1.0236318830709907
saving model
Episode 5900: Time: 0.4065220355987549, Total Reward: 416.0306388908324, Q Loss: 1207880.4291992188, Actor Loss: -69850.50378417969
Episode 5901: Time: 0.35250234603881836, Total Reward: 358.86295777818594, Q Loss: 973470.6586914062, Actor Loss: -60383.27404785156
Episode 5902: Time: 0.2026982307434082, Total Reward: 203.3097429376236, Q Loss: 494785.9169921875, Actor Loss: -34727.03039550781
Episode 5903: Time: 0.8293490409851074, Total Reward: 864.9256662436738, Q Loss: 1975506.9340820312, Actor Loss: -143428.9560546875
Episode 5904: Time: 0.17702794075012207, Total Reward: 174.94186158244858, Q Loss: 440673.93310546875, Actor Loss: -29474.934204101562

Episode 5905: Time: 0.16810226440429688, Total Reward: 164.7499099382036, Q Loss: 347850.3671875, Actor Loss: -29802.564697265625
Episode 5906: Time: 0.6952066421508789, Total Reward: 724.6862608010462, Q Loss: 1727489.7465820312, Actor Loss: -121244.19067382812
Episode 5907: Time: 0.3263528347015381, Total Reward: 332.48616063354274, Q Loss: 773781.5170898438, Actor Loss: -56667.351806640625
Episode 5908: Time: 0.14991521835327148, Total Reward: 147.5319132552215, Q Loss: 340978.865234375, Actor Loss: -25457.352661132812
Episode 5909: Time: 0.17699313163757324, Total Reward: 174.3832895366367, Q Loss: 443487.2587890625, Actor Loss: -30687.477661132812
Episode 5910: Time: 0.14117026329040527, Total Reward: 137.67438313746572, Q Loss: 361102.0234375, Actor Loss: -23518.273681640625
Episode 5911: Time: 0.6516475677490234, Total Reward: 676.7517290024538, Q Loss: 1604405.419921875, Actor Loss: -112158.38708496094
Episode 5912: Time: 0.2820754051208496, Total Reward: 286.86199340951066, Q Loss: 695459.2368164062, Actor Loss: -48511.197509765625
Episode 5913: Time: 0.28203320503234863, Total Reward: 286.3489569870772, Q Loss: 636187.333984375, Actor Loss: -49336.18884277344
Episode 5914: Time: 0.3267202377319336, Total Reward: 333.2843445877172, Q Loss: 846297.3046875, Actor Loss: -57012.17919921875
Episode 5915: Time: 0.16771245002746582, Total Reward: 166.07257996836563, Q Loss: 395905.36865234375, Actor Loss: -29640.821411132812
Episode 5916: Time: 0.3876934051513672, Total Reward: 397.4095401935483, Q Loss: 829551.3579101562, Actor Loss: -68533.27746582031
Episode 5917: Time: 0.18511056900024414, Total Reward: 184.2508796890347, Q Loss: 424378.4326171875, Actor Loss: -32720.658447265625
Episode 5918: Time: 0.2296459674835205, Total Reward: 230.25833734917984, Q Loss: 593449.5854492188, Actor Loss: -39474.454345703125
Episode 5919: Time: 0.7829644680023193, Total Reward: 816.3285996581182, Q Loss: 1834439.0009765625, Actor Loss: -139575.91625976562
Episode 5920: Time: 0.2910916805267334, Total Reward: 296.5873323671549, Q Loss: 686613.4873046875, Actor Loss: -51343.74462890625
Episode 5921: Time: 0.20308351516723633, Total Reward: 203.2651266639609, Q Loss: 407436.55126953125, Actor Loss: -35907.21813964844
Episode 5922: Time: 0.4672071933746338, Total Reward: 480.13634941522605, Q Loss: 1265349.2197265625, Actor Loss: -82650.81787109375
Episode 5923: Time: 0.18499255180358887, Total Reward: 184.2735205520318, Q Loss: 487881.5087890625, Actor Loss: -32767.860595703125
Episode 5924: Time: 0.30026721954345703, Total Reward: 303.4720724021221, Q Loss: 740611.60546875, Actor Loss: -52494.739501953125
Episode 5925: Time: 0.25545787811279297, Total Reward: 258.0215420024124, Q Loss: 572182.5327148438, Actor Loss: -45373.0595703125
Episode 5926: Time: 0.14086365699768066, Total Reward: 137.16281816845202, Q Loss: 262824.384765625, Actor Loss: -25121.434448242188
Episode 5927: Time: 0.13254714012145996, Total Reward: 128.9223115655309, Q Loss: 276357.72314453125, Actor Loss: -23478.489990234375
Episode 5928: Time: 0.13199496269226074, Total Reward: 128.6243039299753, Q Loss: 255065.6396484375, Actor Loss: -23550.1103515625
Episode 5929: Time: 0.4134502410888672, Total Reward: 425.59074545528966, Q Loss: 1010433.3540039062, Actor Loss: -72142.71215820312
Episode 5930: Time: 0.12342596054077148, Total Reward: 119.70032718822964, Q Loss: 299003.45166015625, Actor Loss: -21207.189331054688
Episode 5931: Time: 0.20333647727966309, Total Reward: 202.631433239981, Q Loss: 579218.0004882812, Actor Loss: -35007.629638671875
Episode 5932: Time: 0.22016072273254395, Total Reward: 220.96116170074487, Q Loss: 526245.2924804688, Actor Loss: -40075.65002441406

Episode 5933: Time: 0.2201077938079834, Total Reward: 220.95226501448028, Q Loss: 650672.7241210938, Actor Loss: -38336.645263671875
Episode 5934: Time: 0.22026824951171875, Total Reward: 220.38672304107936, Q Loss: 471786.4130859375, Actor Loss: -38545.81140136719
Episode 5935: Time: 0.2204298973083496, Total Reward: 220.85739630608546, Q Loss: 487510.47607421875, Actor Loss: -40323.665771484375
Episode 5936: Time: 0.07070302963256836, Total Reward: 63.386453728018054, Q Loss: 222581.2412109375, Actor Loss: -12026.628662109375
Episode 5937: Time: 0.31762242317199707, Total Reward: 323.15489249944983, Q Loss: 683588.3090820312, Actor Loss: -56979.160888671875
Episode 5938: Time: 0.24848079681396484, Total Reward: 250.524731464834, Q Loss: 643301.2333984375, Actor Loss: -43704.999755859375
Episode 5939: Time: 0.07066059112548828, Total Reward: 62.80848148527177, Q Loss: 186585.0712890625, Actor Loss: -12361.946044921875
Episode 5940: Time: 0.08802103996276855, Total Reward: 81.8740127861506, Q Loss: 250830.3388671875, Actor Loss: -15172.747924804688
Episode 5941: Time: 0.9415130615234375, Total Reward: 984.2840105163652, Q Loss: 2364306.5161132812, Actor Loss: -168302.51220703125
Episode 5942: Time: 0.16785240173339844, Total Reward: 164.9517587019331, Q Loss: 479111.6416015625, Actor Loss: -29926.236206054688
Episode 5943: Time: 0.13264989852905273, Total Reward: 128.81933273159765, Q Loss: 300705.0849609375, Actor Loss: -23287.365966796875
Episode 5944: Time: 0.2911207675933838, Total Reward: 293.7697763087551, Q Loss: 728520.201171875, Actor Loss: -51200.15686035156
Episode 5945: Time: 0.3609960079193115, Total Reward: 368.0309221852747, Q Loss: 859097.75390625, Actor Loss: -62548.32043457031
Episode 5946: Time: 0.46703553199768066, Total Reward: 481.9159291077002, Q Loss: 1264361.71875, Actor Loss: -81943.25939941406
Episode 5947: Time: 0.11482119560241699, Total Reward: 110.0739741478592, Q Loss: 235176.9453125, Actor Loss: -20094.032104492188
Episode 5948: Time: 0.08871912956237793, Total Reward: 81.37129067079049, Q Loss: 188860.38427734375, Actor Loss: -16001.34033203125
Episode 5949: Time: 0.7741186618804932, Total Reward: 805.6407946395362, Q Loss: 1929065.5708007812, Actor Loss: -138829.30541992188
Episode 5950: Time: 0.22916293144226074, Total Reward: 230.96827633022951, Q Loss: 513951.5107421875, Actor Loss: -41018.434814453125
Episode 5951: Time: 0.44930315017700195, Total Reward: 463.74086696331614, Q Loss: 1043619.5502929688, Actor Loss: -81101.61242675781
Episode 5952: Time: 0.08886289596557617, Total Reward: 82.22460662937732, Q Loss: 273509.1318359375, Actor Loss: -15311.974243164062
Episode 5953: Time: 0.344592809677124, Total Reward: 349.45393503046546, Q Loss: 926022.505859375, Actor Loss: -62177.9140625
Episode 5954: Time: 0.29927587509155273, Total Reward: 303.28805434345077, Q Loss: 819664.0063476562, Actor Loss: -53697.33312988281
Episode 5955: Time: 0.2649061679840088, Total Reward: 268.00639972181705, Q Loss: 695146.5830078125, Actor Loss: -47512.56896972656
Episode 5956: Time: 0.20409011840820312, Total Reward: 201.00949684386126, Q Loss: 561476.4125976562, Actor Loss: -35003.18395996094
Episode 5957: Time: 0.3268752098083496, Total Reward: 333.0671838917122, Q Loss: 763182.3994140625, Actor Loss: -57456.85168457031
Episode 5958: Time: 0.4749181270599365, Total Reward: 462.0977330267542, Q Loss: 1210374.1870117188, Actor Loss: -81048.35217285156
Episode 5959: Time: 0.14025306701660156, Total Reward: 109.70792073989915, Q Loss: 332931.11083984375, Actor Loss: -20383.813598632812
Episode 5960: Time: 0.3028411865234375, Total Reward: 304.8098838250195, Q Loss: 861204.0517578125, Actor Loss: -53947.19860839844

Episode 5961: Time: 0.32942795753479004, Total Reward: 333.6925510927687, Q Loss: 916102.3203125, Actor Loss: -59789.681396484375
Episode 5962: Time: 0.30042433738708496, Total Reward: 304.9439966838181, Q Loss: 692630.4462890625, Actor Loss: -52399.20422363281
Episode 5963: Time: 0.3881185054779053, Total Reward: 396.8977882201809, Q Loss: 1077800.3784179688, Actor Loss: -68072.39782714844
Episode 5964: Time: 0.2378995418548584, Total Reward: 238.92146517335968, Q Loss: 582053.2275390625, Actor Loss: -42404.94567871094
Episode 5965: Time: 0.21163034439086914, Total Reward: 209.50049566721628, Q Loss: 472405.68701171875, Actor Loss: -37621.902587890625
Episode 5966: Time: 0.4052562713623047, Total Reward: 416.74517047092644, Q Loss: 1105495.107421875, Actor Loss: -71641.77661132812
Episode 5967: Time: 0.3080148696899414, Total Reward: 315.4993604071046, Q Loss: 834596.236328125, Actor Loss: -57089.706787109375
Episode 5968: Time: 0.3604745864868164, Total Reward: 370.703689678403, Q Loss: 994245.005859375, Actor Loss: -65172.32458496094
Episode 5969: Time: 0.09701967239379883, Total Reward: 91.14864416287952, Q Loss: 198273.38671875, Actor Loss: -17909.723388671875
Episode 5970: Time: 0.3081319332122803, Total Reward: 314.9598447204064, Q Loss: 776401.888671875, Actor Loss: -55824.75207519531
Episode 5971: Time: 0.08818221092224121, Total Reward: 82.31403591351147, Q Loss: 248127.5576171875, Actor Loss: -16611.374877929688
Episode 5972: Time: 0.19520258903503418, Total Reward: 191.19467704780544, Q Loss: 349540.57568359375, Actor Loss: -34994.566162109375
Episode 5973: Time: 0.07938432693481445, Total Reward: 72.41998703920814, Q Loss: 186969.603515625, Actor Loss: -14040.086303710938
Episode 5974: Time: 0.19382667541503906, Total Reward: 193.1370790281608, Q Loss: 608754.2177734375, Actor Loss: -35359.88806152344
Episode 5975: Time: 0.07930374145507812, Total Reward: 72.73824244190345, Q Loss: 203910.67822265625, Actor Loss: -14411.940307617188
Episode 5976: Time: 0.14220786094665527, Total Reward: 137.68906844042385, Q Loss: 383659.2490234375, Actor Loss: -25689.416625976562
Episode 5977: Time: 0.17620563507080078, Total Reward: 174.89910065827925, Q Loss: 543612.8681640625, Actor Loss: -32534.807495117188
Episode 5978: Time: 0.31742334365844727, Total Reward: 323.78515096195525, Q Loss: 921191.1982421875, Actor Loss: -56273.294677734375
Episode 5979: Time: 0.4027070999145508, Total Reward: 405.1196452104177, Q Loss: 1051457.2099609375, Actor Loss: -71033.83874511719
Episode 5980: Time: 0.4229414463043213, Total Reward: 435.6870676044484, Q Loss: 1207415.5600585938, Actor Loss: -77811.83959960938
Episode 5981: Time: 0.08834481239318848, Total Reward: 82.46349788919126, Q Loss: 240523.51953125, Actor Loss: -15748.18701171875
Episode 5982: Time: 0.49489760398864746, Total Reward: 508.2101534144755, Q Loss: 1443422.3403320312, Actor Loss: -90124.56774902344
Episode 5983: Time: 0.45912981033325195, Total Reward: 471.8291906210742, Q Loss: 1110409.0234375, Actor Loss: -84314.55810546875
Episode 5984: Time: 0.537203311920166, Total Reward: 556.2211884421364, Q Loss: 1639697.4653320312, Actor Loss: -100078.03100585938
Episode 5985: Time: 0.3608396053314209, Total Reward: 369.1434087427644, Q Loss: 841884.4995117188, Actor Loss: -65225.657958984375
Episode 5986: Time: 0.06174635887145996, Total Reward: 53.42789429726502, Q Loss: 157193.009765625, Actor Loss: -11240.927856445312
Episode 5987: Time: 0.24647808074951172, Total Reward: 249.59512992877256, Q Loss: 660256.8466796875, Actor Loss: -45538.09973144531
Episode 5988: Time: 0.54548788807067871, Total Reward: 565.4660221262218, Q Loss: 1631366.0786132812, Actor Loss: -100876.36975097656

Episode 5989: Time: 0.19388747215270996, Total Reward: 191.94151635879695, Q Loss: 579383.23828125, Actor Loss: -34796.953857421875
Episode 5990: Time: 0.4408607482910156, Total Reward: 454.68768473254624, Q Loss: 1351305.7700195312, Actor Loss: -80630.83996582031
Episode 5991: Time: 0.07955551147460938, Total Reward: 71.38622818773904, Q Loss: 278601.06689453125, Actor Loss: -14909.029174804688
Episode 5992: Time: 0.07955169677734375, Total Reward: 72.82027168241538, Q Loss: 252965.8642578125, Actor Loss: -14332.968017578125
Episode 5993: Time: 0.15063977241516113, Total Reward: 145.33858060748452, Q Loss: 410963.1162109375, Actor Loss: -27156.822021484375
Episode 5994: Time: 0.16751694679260254, Total Reward: 164.78032932381515, Q Loss: 396689.572265625, Actor Loss: -30346.721923828125
Episode 5995: Time: 0.15025639533996582, Total Reward: 147.50413241911136, Q Loss: 395767.8173828125, Actor Loss: -29019.978149414062
Episode 5996: Time: 0.18449640274047852, Total Reward: 184.5289553681868, Q Loss: 570687.1875, Actor Loss: -34611.14416503906
Episode 5997: Time: 0.0882718563079834, Total Reward: 81.22228626164025, Q Loss: 348983.9072265625, Actor Loss: -16305.408569335938
Episode 5998: Time: 0.18446993827819824, Total Reward: 184.82367721978923, Q Loss: 570437.6396484375, Actor Loss: -34118.1279296875
Episode 5999: Time: 0.37862277030944824, Total Reward: 387.632593330881, Q Loss: 993803.41796875, Actor Loss: -69236.65698242188
Validation Mean: 9354.536984700728, Validation Std: 0.7485643121716735
saving model
Episode 6000: Time: 0.19533085823059082, Total Reward: 193.6639873032534, Q Loss: 594849.072265625, Actor Loss: -36897.89892578125
Episode 6001: Time: 0.08017373085021973, Total Reward: 72.0062973763136, Q Loss: 218371.01171875, Actor Loss: -14562.317626953125
Episode 6002: Time: 0.13259530067443848, Total Reward: 128.2919470292896, Q Loss: 463919.8759765625, Actor Loss: -24366.700073242188
Episode 6003: Time: 0.18591642379760742, Total Reward: 185.0475905490529, Q Loss: 490026.7353515625, Actor Loss: -33914.363037109375
Episode 6004: Time: 0.3356053829193115, Total Reward: 340.3212105192539, Q Loss: 1037842.8310546875, Actor Loss: -62192.659912109375
Episode 6005: Time: 0.08842134475708008, Total Reward: 81.96978179018052, Q Loss: 203177.7119140625, Actor Loss: -16034.796020507812
Episode 6006: Time: 0.30803465843200684, Total Reward: 313.2393914556372, Q Loss: 1028971.689453125, Actor Loss: -55996.25244140625
Episode 6007: Time: 0.13234949111938477, Total Reward: 128.47688922448165, Q Loss: 372001.853515625, Actor Loss: -24900.2939453125
Episode 6008: Time: 0.22960162162780762, Total Reward: 230.6202918228846, Q Loss: 699095.66015625, Actor Loss: -42969.055419921875
Episode 6009: Time: 0.34348487854003906, Total Reward: 351.28851687940875, Q Loss: 1100840.9228515625, Actor Loss: -62908.927978515625
Episode 6010: Time: 0.24672341346740723, Total Reward: 248.99719968322603, Q Loss: 824154.6650390625, Actor Loss: -45184.616455078125
Episode 6011: Time: 0.4664177894592285, Total Reward: 478.5549587373462, Q Loss: 1375012.2143554688, Actor Loss: -87671.15185546875
Episode 6012: Time: 0.24672174453735352, Total Reward: 246.96602913799165, Q Loss: 727464.3955078125, Actor Loss: -45453.70458984375
Episode 6013: Time: 0.15873146057128906, Total Reward: 155.75191131964257, Q Loss: 407217.3955078125, Actor Loss: -29096.265625
Episode 6014: Time: 0.07194089889526367, Total Reward: 62.49631236796032, Q Loss: 177138.7451171875, Actor Loss: -13456.864135742188
Episode 6015: Time: 0.6442317962646484, Total Reward: 666.2480676802674, Q Loss: 1841198.5268554688, Actor Loss: -119608.67309570312

Episode 6016: Time: 0.2560598850250244, Total Reward: 257.7381830722108, Q Loss: 710820.4418945312, Actor Loss: -47828.37902832031
Episode 6017: Time: 0.11477088928222656, Total Reward: 109.97216527032978, Q Loss: 258994.89501953125, Actor Loss: -21088.89111328125
Episode 6018: Time: 0.3612222671508789, Total Reward: 371.14251481833, Q Loss: 997499.2729492188, Actor Loss: -66680.92993164062
Episode 6019: Time: 0.22038936614990234, Total Reward: 221.10548869775846, Q Loss: 529255.3857421875, Actor Loss: -39971.8681640625
Episode 6020: Time: 0.14983010292053223, Total Reward: 147.25595039313328, Q Loss: 478345.6240234375, Actor Loss: -28841.750244140625
Episode 6021: Time: 0.1848146915435791, Total Reward: 182.9412341002962, Q Loss: 568799.0068359375, Actor Loss: -34983.1435546875
Episode 6022: Time: 0.2732689380645752, Total Reward: 277.37499654216157, Q Loss: 770760.01953125, Actor Loss: -51883.05212402344
Episode 6023: Time: 0.16706299781799316, Total Reward: 166.14904876145377, Q Loss: 418861.12109375, Actor Loss: -32144.788818359375
Episode 6024: Time: 0.2203972339630127, Total Reward: 220.9921237603441, Q Loss: 513457.6533203125, Actor Loss: -42122.05651855469
Episode 6025: Time: 0.2908926010131836, Total Reward: 294.0637674897952, Q Loss: 747550.9736328125, Actor Loss: -55217.8515625
Episode 6026: Time: 0.29143333435058594, Total Reward: 295.051145800365, Q Loss: 762850.31640625, Actor Loss: -54248.80383300781
Episode 6027: Time: 0.7318661212921143, Total Reward: 761.79278083622, Q Loss: 1858510.1787109375, Actor Loss: -136644.2813720703
Episode 6028: Time: 0.15879106521606445, Total Reward: 154.9996589038886, Q Loss: 545438.1796875, Actor Loss: -29784.54150390625
Episode 6029: Time: 0.22989296913146973, Total Reward: 229.53787952940917, Q Loss: 671691.5478515625, Actor Loss: -43180.17077636719
Episode 6030: Time: 0.3965437412261963, Total Reward: 407.70027628335504, Q Loss: 1046736.4321289062, Actor Loss: -73591.68481445312
Episode 6031: Time: 0.3084099292755127, Total Reward: 313.79528585267343, Q Loss: 902849.3310546875, Actor Loss: -57191.201904296875
Episode 6032: Time: 0.4666428565979004, Total Reward: 480.8322183071582, Q Loss: 1261150.9311523438, Actor Loss: -87142.59460449219
Episode 6033: Time: 0.2913670539855957, Total Reward: 296.9141971073606, Q Loss: 732344.5922851562, Actor Loss: -55646.39758300781
Episode 6034: Time: 0.10640525817871094, Total Reward: 100.43002333410746, Q Loss: 248345.70703125, Actor Loss: -19144.078979492188
Episode 6035: Time: 0.30074048042297363, Total Reward: 304.60059216978357, Q Loss: 913117.9125976562, Actor Loss: -56590.394287109375
Episode 6036: Time: 0.14117908477783203, Total Reward: 136.98021851595604, Q Loss: 317703.6025390625, Actor Loss: -26653.583740234375
Episode 6037: Time: 0.12410902976989746, Total Reward: 119.09260151122287, Q Loss: 317546.4033203125, Actor Loss: -24341.699951171875
Episode 6038: Time: 0.07983613014221191, Total Reward: 72.71029976865765, Q Loss: 164586.27734375, Actor Loss: -15500.090454101562
Episode 6039: Time: 0.22925877571105957, Total Reward: 227.82356972318337, Q Loss: 538466.1215820312, Actor Loss: -44178.512451171875
Episode 6040: Time: 0.21204376220703125, Total Reward: 211.66038969548623, Q Loss: 642230.4936523438, Actor Loss: -40481.292724609375
Episode 6041: Time: 0.2557549476623535, Total Reward: 258.5735644450492, Q Loss: 656356.1181640625, Actor Loss: -47453.75280761719
Episode 6042: Time: 0.7305614948272705, Total Reward: 761.7638326383327, Q Loss: 2170038.4028320312, Actor Loss: -136913.17248535156
Episode 6043: Time: 0.2383100986480713, Total Reward: 240.90230416769853, Q Loss: 648867.0522460938, Actor Loss: -44440.75048828125

Episode 6044: Time: 0.11478662490844727, Total Reward: 110.01091140346793, Q Loss: 404923.326171875, Actor Loss: -22313.207885742188
Episode 6045: Time: 0.09763431549072266, Total Reward: 91.56995454006955, Q Loss: 282592.47265625, Actor Loss: -18157.326538085938
Episode 6046: Time: 0.12340450286865234, Total Reward: 117.66283932221492, Q Loss: 299926.212890625, Actor Loss: -23520.084594726562
Episode 6047: Time: 0.23779940605163574, Total Reward: 239.43472438942524, Q Loss: 725205.9033203125, Actor Loss: -43943.959716796875
Episode 6048: Time: 0.2027599811553955, Total Reward: 202.89054858814552, Q Loss: 659081.8134765625, Actor Loss: -37501.510986328125
Episode 6049: Time: 0.2468576431274414, Total Reward: 248.15159706373836, Q Loss: 829079.0244140625, Actor Loss: -45890.561279296875
Episode 6050: Time: 0.09729528427124023, Total Reward: 91.72903507417308, Q Loss: 214169.57421875, Actor Loss: -18808.164916992188
Episode 6051: Time: 0.2209796905517578, Total Reward: 221.8000069279971, Q Loss: 651557.8725585938, Actor Loss: -42588.09619140625
Episode 6052: Time: 0.1674671173095703, Total Reward: 165.32465674659144, Q Loss: 502533.0029296875, Actor Loss: -31730.961059570312
Episode 6053: Time: 0.21383953094482422, Total Reward: 212.0045808302056, Q Loss: 569537.029296875, Actor Loss: -39529.92626953125
Episode 6054: Time: 0.3349747657775879, Total Reward: 343.58196915731014, Q Loss: 980615.625, Actor Loss: -64846.99353027344
Episode 6055: Time: 0.21266841888427734, Total Reward: 212.49847000475742, Q Loss: 543095.2739257812, Actor Loss: -39532.51403808594
Episode 6056: Time: 0.23801541328430176, Total Reward: 238.86220830410326, Q Loss: 627675.1245117188, Actor Loss: -45268.03356933594
Episode 6057: Time: 0.08824372291564941, Total Reward: 82.33337370821654, Q Loss: 248349.52734375, Actor Loss: -17526.947509765625
Episode 6058: Time: 0.14138197898864746, Total Reward: 135.88723718357738, Q Loss: 421569.626953125, Actor Loss: -26719.37646484375
Episode 6059: Time: 0.19386601448059082, Total Reward: 193.02546005826017, Q Loss: 605362.462890625, Actor Loss: -36753.91711425781
Episode 6060: Time: 0.2124474048614502, Total Reward: 210.65708185632263, Q Loss: 581737.70703125, Actor Loss: -39755.03564453125
Episode 6061: Time: 0.19395923614501953, Total Reward: 193.95432832752928, Q Loss: 445829.1328125, Actor Loss: -38833.13830566406
Episode 6062: Time: 0.13281846046447754, Total Reward: 128.66592452720747, Q Loss: 319624.427734375, Actor Loss: -25094.9716796875
Episode 6063: Time: 0.5632383823394775, Total Reward: 584.4588394443603, Q Loss: 1797234.8852539062, Actor Loss: -106234.18200683594
Episode 6064: Time: 0.4495265483856201, Total Reward: 463.46554332466724, Q Loss: 1281746.0078125, Actor Loss: -85822.96325683594
Episode 6065: Time: 0.2036292552947998, Total Reward: 203.2708134532887, Q Loss: 631511.9853515625, Actor Loss: -38013.078125
Episode 6066: Time: 0.12355923652648926, Total Reward: 117.73014268584997, Q Loss: 419409.7265625, Actor Loss: -24018.1171875
Episode 6067: Time: 0.38893771171569824, Total Reward: 397.22974282463673, Q Loss: 1153675.35546875, Actor Loss: -72996.88549804688
Episode 6068: Time: 0.2732582092285156, Total Reward: 278.01807643903334, Q Loss: 716103.1059570312, Actor Loss: -51576.67138671875
Episode 6069: Time: 0.2202897071838379, Total Reward: 221.66023856763368, Q Loss: 613452.5708007812, Actor Loss: -41507.54675292969
Episode 6070: Time: 0.21160173416137695, Total Reward: 210.19110452213988, Q Loss: 611848.0434570312, Actor Loss: -41371.319091796875
Episode 6071: Time: 0.14091920852661133, Total Reward: 138.13245757227293, Q Loss: 346465.9697265625, Actor Loss: -26697.775512695312

Episode 6072: Time: 0.2114253044128418, Total Reward: 212.2059710862656, Q Loss: 527038.130859375, Actor Loss: -40215.506103515625
Episode 6073: Time: 0.6165337562561035, Total Reward: 642.1115046075072, Q Loss: 1847021.8603515625, Actor Loss: -116448.81848144531
Episode 6074: Time: 0.48535776138305664, Total Reward: 500.63873122987513, Q Loss: 1260748.3896484375, Actor Loss: -94133.76147460938
Episode 6075: Time: 0.4929676055908203, Total Reward: 508.9054460749387, Q Loss: 1474563.6762695312, Actor Loss: -92943.72680664062
Episode 6076: Time: 0.2814157009124756, Total Reward: 285.6985780817212, Q Loss: 801522.359375, Actor Loss: -54791.762451171875
Episode 6077: Time: 0.3435208797454834, Total Reward: 350.50145869696325, Q Loss: 1024295.6357421875, Actor Loss: -65257.00231933594
Episode 6078: Time: 0.32687830924987793, Total Reward: 330.6165216396482, Q Loss: 781395.5615234375, Actor Loss: -63222.776611328125
Episode 6079: Time: 0.27526068687438965, Total Reward: 277.2182683037118, Q Loss: 750144.4484863281, Actor Loss: -52700.59143066406
Episode 6080: Time: 0.22965383529663086, Total Reward: 230.9760654468116, Q Loss: 748736.1611328125, Actor Loss: -43039.50244140625
Episode 6081: Time: 0.14126133918762207, Total Reward: 137.80719929031642, Q Loss: 433539.484375, Actor Loss: -28126.723999023438
Episode 6082: Time: 0.194305419921875, Total Reward: 192.07444862994, Q Loss: 608243.99609375, Actor Loss: -37470.31237792969
Episode 6083: Time: 0.35256385803222656, Total Reward: 360.6628544955004, Q Loss: 1052397.91015625, Actor Loss: -67696.29089355469
Episode 6084: Time: 0.21156835556030273, Total Reward: 212.2169663106528, Q Loss: 602609.5712890625, Actor Loss: -40827.16491699219
Episode 6085: Time: 0.3080143928527832, Total Reward: 314.6215488910605, Q Loss: 987598.642578125, Actor Loss: -59717.03662109375
Episode 6086: Time: 0.09751653671264648, Total Reward: 91.36845147258529, Q Loss: 201680.9072265625, Actor Loss: -18246.865600585938
Episode 6087: Time: 0.2647867202758789, Total Reward: 267.7604799168628, Q Loss: 831915.17578125, Actor Loss: -51284.993408203125
Episode 6088: Time: 0.2032771110534668, Total Reward: 202.29007578482535, Q Loss: 475052.509765625, Actor Loss: -38377.4599609375
Episode 6089: Time: 0.21166276931762695, Total Reward: 211.29900096417103, Q Loss: 618542.8979492188, Actor Loss: -41061.94299316406
Episode 6090: Time: 0.25638699531555176, Total Reward: 258.8753165038928, Q Loss: 776696.3798828125, Actor Loss: -48939.27868652344
Episode 6091: Time: 0.31060099601745605, Total Reward: 314.22986474534355, Q Loss: 997647.5234375, Actor Loss: -60146.04553222656
Episode 6092: Time: 0.29163217544555664, Total Reward: 295.1979541094817, Q Loss: 960258.8994140625, Actor Loss: -57307.05505371094
Episode 6093: Time: 0.2921435832977295, Total Reward: 294.6945221868523, Q Loss: 938587.3349609375, Actor Loss: -55903.26916503906
Episode 6094: Time: 0.23850059509277344, Total Reward: 238.69866239915208, Q Loss: 757958.904296875, Actor Loss: -44893.11767578125
Episode 6095: Time: 0.5313103199005127, Total Reward: 547.3175703940833, Q Loss: 1551307.5346679688, Actor Loss: -101350.96887207031
Episode 6096: Time: 0.10615921020507812, Total Reward: 100.66362247668877, Q Loss: 224318.9453125, Actor Loss: -20099.94482421875
Episode 6097: Time: 0.17712020874023438, Total Reward: 174.56120323855194, Q Loss: 536597.66015625, Actor Loss: -34408.652099609375
Episode 6098: Time: 0.3709299564361572, Total Reward: 380.0272761749826, Q Loss: 1087551.8110351562, Actor Loss: -72843.08142089844
Episode 6099: Time: 0.14124822616577148, Total Reward: 136.38597161942826, Q Loss: 366539.71533203125, Actor Loss: -27104.823120117188

Validation Mean: 9354.50291353751, Validation Std: 0.7556317357116245
saving model
Episode 6100: Time: 0.5308566093444824, Total Reward: 518.8441412716045, Q Loss: 1612650.33984375, Actor Loss: -98971.71997070312
Episode 6101: Time: 0.23898744583129883, Total Reward: 240.7286636784189, Q Loss: 753640.8828125, Actor Loss: -46958.41174316406
Episode 6102: Time: 0.211991548538208, Total Reward: 212.41525856296846, Q Loss: 508528.365234375, Actor Loss: -39901.27770996094
Episode 6103: Time: 0.5906527042388916, Total Reward: 612.4381022642937, Q Loss: 1743660.8212890625, Actor Loss: -115593.55639648438
Episode 6104: Time: 0.13248229026794434, Total Reward: 128.55871502613192, Q Loss: 393650.5244140625, Actor Loss: -26108.802124023438
Episode 6105: Time: 0.16788101196289062, Total Reward: 166.03094768136705, Q Loss: 496877.099609375, Actor Loss: -32853.324951171875
Episode 6106: Time: 0.39726829528808594, Total Reward: 404.9781638996944, Q Loss: 1269958.8271484375, Actor Loss: -78104.82971191406
Episode 6107: Time: 0.21221089363098145, Total Reward: 210.8592560816253, Q Loss: 719718.509765625, Actor Loss: -41051.35583496094
Episode 6108: Time: 0.24702239036560059, Total Reward: 249.8376949685814, Q Loss: 728422.7392578125, Actor Loss: -47520.595947265625
Episode 6109: Time: 0.2212514877319336, Total Reward: 220.370851857079, Q Loss: 643026.306640625, Actor Loss: -44323.838134765625
Episode 6110: Time: 0.18557357788085938, Total Reward: 184.53166196512785, Q Loss: 637753.8090820312, Actor Loss: -35660.73132324219
Episode 6111: Time: 0.06288838386535645, Total Reward: 53.85675655127415, Q Loss: 206444.8681640625, Actor Loss: -11497.841674804688
Episode 6112: Time: 0.4665110111236572, Total Reward: 482.9414196073799, Q Loss: 1270877.8842773438, Actor Loss: -91612.63562011719
Episode 6113: Time: 0.6435768604278564, Total Reward: 665.6252308257983, Q Loss: 2074969.126953125, Actor Loss: -125747.97766113281
Episode 6114: Time: 0.6519665718078613, Total Reward: 676.2644684560898, Q Loss: 2193678.3212890625, Actor Loss: -128917.50085449219
Episode 6115: Time: 0.2379906177520752, Total Reward: 240.08783618619188, Q Loss: 654795.1826171875, Actor Loss: -46393.21240234375
Episode 6116: Time: 0.1323530673980713, Total Reward: 128.46271028649076, Q Loss: 484433.4619140625, Actor Loss: -26428.055786132812
Episode 6117: Time: 0.19429922103881836, Total Reward: 193.9921647070017, Q Loss: 595054.7548828125, Actor Loss: -38576.23864746094
Episode 6118: Time: 0.1494734287261963, Total Reward: 147.3886584035199, Q Loss: 403585.5341796875, Actor Loss: -28928.444946289062
Episode 6119: Time: 0.21152663230895996, Total Reward: 212.10265804600868, Q Loss: 776907.80078125, Actor Loss: -41788.93640136719
Episode 6120: Time: 0.3195981979370117, Total Reward: 324.8881416391369, Q Loss: 907900.4301757812, Actor Loss: -63235.384033203125
Episode 6121: Time: 0.7572536468505859, Total Reward: 789.6814425291453, Q Loss: 2086417.1083984375, Actor Loss: -150826.88708496094
Episode 6122: Time: 0.1945970058441162, Total Reward: 192.24777001859306, Q Loss: 542607.6005859375, Actor Loss: -36992.07067871094
Episode 6123: Time: 0.1509265899658203, Total Reward: 145.2403562005127, Q Loss: 608677.5498046875, Actor Loss: -29624.384521484375
Episode 6124: Time: 0.3197934627532959, Total Reward: 323.7791346541431, Q Loss: 992537.6650390625, Actor Loss: -63504.93884277344
Episode 6125: Time: 0.12362980842590332, Total Reward: 119.37717705928222, Q Loss: 376487.951171875, Actor Loss: -24462.937377929688
Episode 6126: Time: 0.11559510231018066, Total Reward: 109.96682354717672, Q Loss: 315451.79150390625, Actor Loss: -24128.752197265625

Episode 6127: Time: 0.2224133014678955, Total Reward: 221.55353624080576, Q Loss: 778338.7509765625, Actor Loss: -44070.14782714844
Episode 6128: Time: 0.21357107162475586, Total Reward: 211.78156018222182, Q Loss: 768745.2646484375, Actor Loss: -40825.76452636719
Episode 6129: Time: 0.2750837802886963, Total Reward: 277.4334189172559, Q Loss: 919652.6391601562, Actor Loss: -56491.92077636719
Episode 6130: Time: 0.15968680381774902, Total Reward: 156.30324088114065, Q Loss: 552850.4208984375, Actor Loss: -31768.510986328125
Episode 6131: Time: 0.29265618324279785, Total Reward: 296.8807172403981, Q Loss: 1020863.9360351562, Actor Loss: -57940.33752441406
Episode 6132: Time: 0.12446331977844238, Total Reward: 119.32922210858986, Q Loss: 406498.6572265625, Actor Loss: -24378.682006835938
Episode 6133: Time: 0.15933585166931152, Total Reward: 156.52417735099334, Q Loss: 406211.2197265625, Actor Loss: -33074.572265625
Episode 6134: Time: 0.19430160522460938, Total Reward: 192.551257349601, Q Loss: 454932.1171875, Actor Loss: -39423.678466796875
Episode 6135: Time: 0.33537983894348145, Total Reward: 343.0543218666843, Q Loss: 1193329.5986328125, Actor Loss: -66512.13293457031
Episode 6136: Time: 0.47571897506713867, Total Reward: 491.0116421570127, Q Loss: 1455116.783203125, Actor Loss: -92395.39831542969
Episode 6137: Time: 0.07942533493041992, Total Reward: 72.15992815302278, Q Loss: 204436.5390625, Actor Loss: -15957.380493164062
Episode 6138: Time: 0.283034086227417, Total Reward: 286.88735560502005, Q Loss: 857988.9096679688, Actor Loss: -56313.689208984375
Episode 6139: Time: 0.2555263042449951, Total Reward: 258.6579869876642, Q Loss: 796869.2744140625, Actor Loss: -51029.87316894531
Episode 6140: Time: 0.184950590133667, Total Reward: 181.97201430906935, Q Loss: 589845.2446289062, Actor Loss: -38750.73352050781
Episode 6141: Time: 0.12416720390319824, Total Reward: 119.81587813997382, Q Loss: 454224.0830078125, Actor Loss: -25895.899658203125
Episode 6142: Time: 0.2296442985534668, Total Reward: 230.8933318763765, Q Loss: 819663.7666015625, Actor Loss: -45262.25817871094
Episode 6143: Time: 0.2206120491027832, Total Reward: 220.04537837348494, Q Loss: 739263.5419921875, Actor Loss: -43206.08312988281
Episode 6144: Time: 0.10585880279541016, Total Reward: 100.08017900137574, Q Loss: 267459.857421875, Actor Loss: -21282.868041992188
Episode 6145: Time: 0.10608553886413574, Total Reward: 100.76156466729844, Q Loss: 358084.33984375, Actor Loss: -21205.726684570312
Episode 6146: Time: 0.17670106887817383, Total Reward: 174.31709190905462, Q Loss: 541630.9677734375, Actor Loss: -35739.52526855469
Episode 6147: Time: 0.37911486625671387, Total Reward: 387.3963563536554, Q Loss: 1361611.3291015625, Actor Loss: -74424.046875
Episode 6148: Time: 0.16721725463867188, Total Reward: 164.73586018151227, Q Loss: 630638.0498046875, Actor Loss: -33065.14709472656
Episode 6149: Time: 0.27292847633361816, Total Reward: 276.7576494610948, Q Loss: 931175.947265625, Actor Loss: -54167.36877441406
Episode 6150: Time: 0.2305748462677002, Total Reward: 228.71071986593694, Q Loss: 723268.1259765625, Actor Loss: -45269.21765136719
Episode 6151: Time: 0.14161968231201172, Total Reward: 137.94781547673165, Q Loss: 462473.974609375, Actor Loss: -28787.03662109375
Episode 6152: Time: 0.29119229316711426, Total Reward: 295.64051019835273, Q Loss: 919177.8349609375, Actor Loss: -58188.678955078125
Episode 6153: Time: 0.24654626846313477, Total Reward: 249.66103825124785, Q Loss: 842363.8388671875, Actor Loss: -49920.92590332031
Episode 6154: Time: 1.2415571212768555, Total Reward: 1301.5355995191624, Q Loss: 3963284.5932617188, Actor Loss: -248404.9569091797

Episode 6155: Time: 0.2909724712371826, Total Reward: 294.5080359161681, Q Loss: 1047303.22265625, Actor Loss: -57917.60168457031
Episode 6156: Time: 0.26491689682006836, Total Reward: 268.13321399137357, Q Loss: 856517.8779296875, Actor Loss: -54082.02392578125
Episode 6157: Time: 0.18570232391357422, Total Reward: 183.35757946988878, Q Loss: 731698.48828125, Actor Loss: -37382.795654296875
Episode 6158: Time: 0.14189457893371582, Total Reward: 138.13414615187776, Q Loss: 465886.5615234375, Actor Loss: -28748.630615234375
Episode 6159: Time: 0.16785836219787598, Total Reward: 164.75294197447062, Q Loss: 676000.87890625, Actor Loss: -33946.025146484375
Episode 6160: Time: 0.38864827156066895, Total Reward: 394.8623776667385, Q Loss: 1375378.3232421875, Actor Loss: -76969.18469238281
Episode 6161: Time: 0.28264355659484863, Total Reward: 286.31612990204746, Q Loss: 779705.8950195312, Actor Loss: -58327.178466796875
Episode 6162: Time: 0.36151766777038574, Total Reward: 369.1892519540703, Q Loss: 1199267.2060546875, Actor Loss: -71880.07055664062
Episode 6163: Time: 0.17647290229797363, Total Reward: 175.90842647565975, Q Loss: 564451.0419921875, Actor Loss: -36572.70642089844
Episode 6164: Time: 0.05361795425415039, Total Reward: 44.403029014541815, Q Loss: 172292.8525390625, Actor Loss: -10590.693969726562
Episode 6165: Time: 0.09025740623474121, Total Reward: 82.0544511875264, Q Loss: 369344.4384765625, Actor Loss: -17038.371215820312
Episode 6166: Time: 0.3088264465332031, Total Reward: 315.0641994878574, Q Loss: 945563.2509765625, Actor Loss: -60284.6748046875
Episode 6167: Time: 0.15938305854797363, Total Reward: 156.71952469095388, Q Loss: 392195.9521484375, Actor Loss: -32284.796508789062
Episode 6168: Time: 0.12436914443969727, Total Reward: 119.08941128333139, Q Loss: 394163.3037109375, Actor Loss: -25517.423095703125
Episode 6169: Time: 0.1767563819885254, Total Reward: 175.05399499501274, Q Loss: 573388.78515625, Actor Loss: -36425.1396484375
Episode 6170: Time: 0.3182077407836914, Total Reward: 323.0874544626278, Q Loss: 1241330.2084960938, Actor Loss: -65969.65417480469
Episode 6171: Time: 0.48498106002807617, Total Reward: 500.737446903667, Q Loss: 1571575.2861328125, Actor Loss: -98281.24755859375
Episode 6172: Time: 0.29154086112976074, Total Reward: 295.1527087786873, Q Loss: 1277791.51171875, Actor Loss: -60048.205322265625
Episode 6173: Time: 0.2033858299255371, Total Reward: 200.71083471216605, Q Loss: 689535.8125, Actor Loss: -40123.11486816406
Episode 6174: Time: 0.1679060459136963, Total Reward: 165.71668878333386, Q Loss: 551198.7705078125, Actor Loss: -35177.51818847656
Episode 6175: Time: 0.2559518814086914, Total Reward: 258.6757598136151, Q Loss: 1008393.7514648438, Actor Loss: -52815.97314453125
Episode 6176: Time: 0.24702787399291992, Total Reward: 248.63831770358323, Q Loss: 817245.2890625, Actor Loss: -51013.81652832031
Episode 6177: Time: 0.23867177963256836, Total Reward: 240.5292170064663, Q Loss: 757820.2822265625, Actor Loss: -48101.69665527344
Episode 6178: Time: 0.22063636779785156, Total Reward: 219.46305357425567, Q Loss: 924849.7919921875, Actor Loss: -44374.45068359375
Episode 6179: Time: 0.14996600151062012, Total Reward: 147.20416941285808, Q Loss: 453391.115234375, Actor Loss: -30509.316162109375
Episode 6180: Time: 0.21212029457092285, Total Reward: 210.48183870958607, Q Loss: 670401.6923828125, Actor Loss: -43716.35986328125
Episode 6181: Time: 0.1322765350341797, Total Reward: 127.85226142296507, Q Loss: 393765.5947265625, Actor Loss: -26996.320556640625
Episode 6182: Time: 0.3096647262573242, Total Reward: 313.2305357124803, Q Loss: 949374.005859375, Actor Loss: -61242.59924316406

Episode 6183: Time: 0.2999589443206787, Total Reward: 305.6708134058926, Q Loss: 1012690.271484375, Actor Loss: -62018.90100097656
Episode 6184: Time: 0.29131269454956055, Total Reward: 296.52640878505986, Q Loss: 916570.2900390625, Actor Loss: -60065.66857910156
Episode 6185: Time: 0.15001678466796875, Total Reward: 147.4841211590581, Q Loss: 505233.2294921875, Actor Loss: -31637.080444335938
Episode 6186: Time: 0.07106995582580566, Total Reward: 63.101131690608156, Q Loss: 274623.09765625, Actor Loss: -14406.492431640625
Episode 6187: Time: 0.07961344718933105, Total Reward: 72.94372374636181, Q Loss: 340053.40234375, Actor Loss: -16353.40673828125
Episode 6188: Time: 0.38812708854675293, Total Reward: 396.5383401465731, Q Loss: 1271562.68359375, Actor Loss: -80325.89880371094
Episode 6189: Time: 0.18606305122375488, Total Reward: 183.88300402050558, Q Loss: 430069.7646484375, Actor Loss: -36709.77453613281
Episode 6190: Time: 0.22106146812438965, Total Reward: 219.93916580740967, Q Loss: 716251.0966796875, Actor Loss: -44778.04626464844
Episode 6191: Time: 0.25603699684143066, Total Reward: 230.2160798022533, Q Loss: 790644.07421875, Actor Loss: -45337.33349609375
Episode 6192: Time: 0.2391963005065918, Total Reward: 238.91513341292978, Q Loss: 680099.4838867188, Actor Loss: -48565.19860839844
Episode 6193: Time: 0.3797585964202881, Total Reward: 387.9333144047533, Q Loss: 1304682.2919921875, Actor Loss: -77346.41491699219
Episode 6194: Time: 0.150437593460083, Total Reward: 146.6687266511886, Q Loss: 555841.6015625, Actor Loss: -30867.523681640625
Episode 6195: Time: 0.12417721748352051, Total Reward: 119.43624796042229, Q Loss: 339750.8427734375, Actor Loss: -24981.8125
Episode 6196: Time: 0.48721766471862793, Total Reward: 498.27992408999387, Q Loss: 1632594.556640625, Actor Loss: -99706.88256835938
Episode 6197: Time: 0.5575883388519287, Total Reward: 576.1807925807888, Q Loss: 1628905.1206054688, Actor Loss: -114312.80847167969
Episode 6198: Time: 0.24823904037475586, Total Reward: 248.72015244260828, Q Loss: 883445.1240234375, Actor Loss: -51450.211181640625
Episode 6199: Time: 0.40679502487182617, Total Reward: 416.50097473158826, Q Loss: 1345553.7734375, Actor Loss: -83398.58703613281
Validation Mean: 9355.731508147826, Validation Std: 0.8152418275226166
saving model
Episode 6200: Time: 0.23228001594543457, Total Reward: 229.64828701770415, Q Loss: 797042.9775390625, Actor Loss: -47924.610595703125
Episode 6201: Time: 0.21340513229370117, Total Reward: 211.64628379303764, Q Loss: 846021.78515625, Actor Loss: -42618.766357421875
Episode 6202: Time: 0.2304847240447998, Total Reward: 231.09916528143873, Q Loss: 812462.58984375, Actor Loss: -47085.5556640625
Episode 6203: Time: 0.5040302276611328, Total Reward: 517.6399111688224, Q Loss: 1793666.966796875, Actor Loss: -102275.34069824219
Episode 6204: Time: 0.19439482688903809, Total Reward: 190.72589349158125, Q Loss: 648485.111328125, Actor Loss: -40601.63439941406
Episode 6205: Time: 0.09817624092102051, Total Reward: 91.63714672077595, Q Loss: 257988.0830078125, Actor Loss: -19687.071533203125
Episode 6206: Time: 0.11556768417358398, Total Reward: 110.44757812874111, Q Loss: 387265.04296875, Actor Loss: -22673.985717773438
Episode 6207: Time: 0.19520926475524902, Total Reward: 191.92345265070801, Q Loss: 698923.4404296875, Actor Loss: -40079.341552734375
Episode 6208: Time: 0.1062018871307373, Total Reward: 100.14478198654642, Q Loss: 292435.7998046875, Actor Loss: -22127.353271484375
Episode 6209: Time: 0.4325826168060303, Total Reward: 444.3907300692779, Q Loss: 1515062.6352539062, Actor Loss: -90230.65661621094

Episode 6210: Time: 0.12365150451660156, Total Reward: 118.73887840437847, Q Loss: 690749.69140625, Actor Loss: -25659.189697265625
Episode 6211: Time: 0.23915576934814453, Total Reward: 240.19537594330004, Q Loss: 1002522.5712890625, Actor Loss: -49114.05139160156
Episode 6212: Time: 0.42676639556884766, Total Reward: 436.5112557046778, Q Loss: 1485605.916015625, Actor Loss: -87689.36181640625
Episode 6213: Time: 0.1677260398864746, Total Reward: 165.50452274941944, Q Loss: 762496.46875, Actor Loss: -35893.02197265625
Episode 6214: Time: 0.283433198928833, Total Reward: 286.37314380879184, Q Loss: 1271430.4365234375, Actor Loss: -60226.70910644531
Episode 6215: Time: 0.2736024856567383, Total Reward: 277.7756748288315, Q Loss: 1031981.0322265625, Actor Loss: -56049.05798339844
Episode 6216: Time: 0.24722814559936523, Total Reward: 249.6511090833004, Q Loss: 890812.6396484375, Actor Loss: -50909.84033203125
Episode 6217: Time: 0.40656375885009766, Total Reward: 415.2817261895386, Q Loss: 1564907.2177734375, Actor Loss: -84870.82238769531
Episode 6218: Time: 0.21218109130859375, Total Reward: 211.5962661133176, Q Loss: 868260.8212890625, Actor Loss: -43982.18078613281
Episode 6219: Time: 0.41475653648376465, Total Reward: 423.2746313732908, Q Loss: 1426023.583984375, Actor Loss: -85097.26550292969
Episode 6220: Time: 0.3718295097351074, Total Reward: 379.7906704381666, Q Loss: 1142582.4287109375, Actor Loss: -77703.78588867188
Episode 6221: Time: 0.53033447265625, Total Reward: 547.8537475068318, Q Loss: 1745111.6274414062, Actor Loss: -110003.62756347656
Episode 6222: Time: 0.41540050506591797, Total Reward: 424.425573389792, Q Loss: 1518202.2075195312, Actor Loss: -86730.52209472656
Episode 6223: Time: 0.32725954055786133, Total Reward: 333.2449037051602, Q Loss: 1298091.9814453125, Actor Loss: -67948.58032226562
Episode 6224: Time: 0.9278509616851807, Total Reward: 967.0384109501226, Q Loss: 2960778.9799804688, Actor Loss: -190555.1026611328
Episode 6225: Time: 0.26603031158447266, Total Reward: 266.30212449252724, Q Loss: 821872.7783203125, Actor Loss: -56355.79602050781
Episode 6226: Time: 0.0888204574584961, Total Reward: 82.05838683342377, Q Loss: 305092.1123046875, Actor Loss: -18156.23291015625
Episode 6227: Time: 0.12438321113586426, Total Reward: 119.00390337642756, Q Loss: 451027.9833984375, Actor Loss: -25411.232299804688
Episode 6228: Time: 0.17712712287902832, Total Reward: 174.45474679256955, Q Loss: 615534.4208984375, Actor Loss: -37177.52685546875
Episode 6229: Time: 0.28374218940734863, Total Reward: 287.04322476245767, Q Loss: 1228272.255859375, Actor Loss: -60769.841796875
Episode 6230: Time: 0.07971644401550293, Total Reward: 72.67112200483015, Q Loss: 220073.4140625, Actor Loss: -16664.2177734375
Episode 6231: Time: 0.25649309158325195, Total Reward: 256.156774546132, Q Loss: 921086.3955078125, Actor Loss: -54123.47009277344
Episode 6232: Time: 0.22153782844543457, Total Reward: 222.1353012972834, Q Loss: 1047323.427734375, Actor Loss: -47946.1416015625
Episode 6233: Time: 0.20384526252746582, Total Reward: 203.39794575820983, Q Loss: 802145.146484375, Actor Loss: -43359.73400878906
Episode 6234: Time: 0.11523199081420898, Total Reward: 110.17450496237608, Q Loss: 287002.5537109375, Actor Loss: -23295.21533203125
Episode 6235: Time: 0.16860270500183105, Total Reward: 166.00929807047225, Q Loss: 579240.4951171875, Actor Loss: -36500.6923828125
Episode 6236: Time: 0.2747535705566406, Total Reward: 276.1400543583155, Q Loss: 1118575.4287109375, Actor Loss: -58226.76135253906
Episode 6237: Time: 0.21284055709838867, Total Reward: 211.52173276847807, Q Loss: 859969.37890625, Actor Loss: -44732.615966796875

Episode 6238: Time: 0.4242854118347168, Total Reward: 436.3951554658201, Q Loss: 1530088.9755859375, Actor Loss: -87724.24865722656
Episode 6239: Time: 0.19450640678405762, Total Reward: 193.48331725247525, Q Loss: 792979.095703125, Actor Loss: -41206.954833984375
Episode 6240: Time: 0.08923530578613281, Total Reward: 81.81719664500073, Q Loss: 366527.802734375, Actor Loss: -18673.26123046875
Episode 6241: Time: 0.15916132926940918, Total Reward: 155.4016224076091, Q Loss: 538600.4267578125, Actor Loss: -33958.20837402344
Episode 6242: Time: 0.08055305480957031, Total Reward: 72.13669320344178, Q Loss: 271961.2880859375, Actor Loss: -17218.236450195312
Episode 6243: Time: 0.15957117080688477, Total Reward: 156.54004954981824, Q Loss: 385370.3837890625, Actor Loss: -33611.779541015625
Episode 6244: Time: 0.4086599349975586, Total Reward: 417.09095504051834, Q Loss: 1364729.859375, Actor Loss: -85936.82531738281
Episode 6245: Time: 0.48621535301208496, Total Reward: 501.1685485644177, Q Loss: 1881161.5263671875, Actor Loss: -103823.00366210938
Episode 6246: Time: 0.22144556045532227, Total Reward: 221.28854214698885, Q Loss: 751043.052734375, Actor Loss: -45593.9375
Episode 6247: Time: 0.26505374908447266, Total Reward: 267.45997937141425, Q Loss: 906659.498046875, Actor Loss: -54751.954833984375
Episode 6248: Time: 0.31023573875427246, Total Reward: 314.409085311625, Q Loss: 1022392.5610351562, Actor Loss: -65316.81628417969
Episode 6249: Time: 0.15109944343566895, Total Reward: 146.79563815347393, Q Loss: 584737.982421875, Actor Loss: -32132.947265625
Episode 6250: Time: 0.23108577728271484, Total Reward: 230.01627553489857, Q Loss: 751033.1650390625, Actor Loss: -48348.251708984375
Episode 6251: Time: 0.14160799980163574, Total Reward: 137.22361059889607, Q Loss: 684916.1669921875, Actor Loss: -29714.20166015625
Episode 6252: Time: 0.1688838005065918, Total Reward: 166.1226329846354, Q Loss: 707047.9404296875, Actor Loss: -35045.051513671875
Episode 6253: Time: 0.2128591537475586, Total Reward: 211.95833829718805, Q Loss: 817457.1293945312, Actor Loss: -45598.80920410156
Episode 6254: Time: 0.4542806148529053, Total Reward: 416.17403599970913, Q Loss: 1527090.5595703125, Actor Loss: -85535.67895507812
Episode 6255: Time: 0.48891258239746094, Total Reward: 407.455490508881, Q Loss: 1444172.2705078125, Actor Loss: -84865.09887695312
Episode 6256: Time: 0.08719635009765625, Total Reward: 62.76073013534481, Q Loss: 370465.185546875, Actor Loss: -15183.653198242188
Episode 6257: Time: 0.1635732650756836, Total Reward: 126.4526842856486, Q Loss: 504907.39453125, Actor Loss: -28949.409790039062
Episode 6258: Time: 0.3589763641357422, Total Reward: 294.37949239900956, Q Loss: 918711.4521484375, Actor Loss: -60720.52478027344
Episode 6259: Time: 0.28256893157958984, Total Reward: 230.05911283704899, Q Loss: 740810.1206054688, Actor Loss: -47305.66613769531
Episode 6260: Time: 0.46649622917175293, Total Reward: 388.896171458799, Q Loss: 1194962.515625, Actor Loss: -80041.26586914062
Episode 6261: Time: 0.22816061973571777, Total Reward: 184.57762619725597, Q Loss: 757166.6181640625, Actor Loss: -38374.6865234375
Episode 6262: Time: 0.6832871437072754, Total Reward: 574.2076114022465, Q Loss: 2032895.3916015625, Actor Loss: -116401.67529296875
Episode 6263: Time: 0.17363238334655762, Total Reward: 136.6144010683668, Q Loss: 384040.638671875, Actor Loss: -30525.731689453125
Episode 6264: Time: 0.2606799602508545, Total Reward: 211.51707414224092, Q Loss: 657646.2158203125, Actor Loss: -44509.10437011719
Episode 6265: Time: 0.27140092849731445, Total Reward: 220.4400466888958, Q Loss: 839954.912109375, Actor Loss: -47168.061279296875

Episode 6266: Time: 0.23865890502929688, Total Reward: 192.5704390935077, Q Loss: 802222.68359375, Actor Loss: -42171.21044921875
Episode 6267: Time: 0.5094006061553955, Total Reward: 426.6882082849799, Q Loss: 1582929.9765625, Actor Loss: -89818.23815917969
Episode 6268: Time: 0.4661381244659424, Total Reward: 388.7176135551643, Q Loss: 1454713.060546875, Actor Loss: -79112.525390625
Episode 6269: Time: 0.3362002372741699, Total Reward: 276.2280620526852, Q Loss: 1079397.9814453125, Actor Loss: -59435.260498046875
Episode 6270: Time: 0.30365943908691406, Total Reward: 248.68559956470037, Q Loss: 1112861.2587890625, Actor Loss: -53169.42138671875
Episode 6271: Time: 0.2600860595703125, Total Reward: 212.5686068183386, Q Loss: 715115.404296875, Actor Loss: -45283.02697753906
Episode 6272: Time: 0.1624431610107422, Total Reward: 128.16104158637054, Q Loss: 474018.48828125, Actor Loss: -27841.9619140625
Episode 6273: Time: 0.3688371181488037, Total Reward: 306.40142700863106, Q Loss: 1047674.3349609375, Actor Loss: -65351.46838378906
Episode 6274: Time: 0.2606170177459717, Total Reward: 209.67775443507708, Q Loss: 711895.6181640625, Actor Loss: -44920.737548828125
Episode 6275: Time: 0.2604992389678955, Total Reward: 211.73608800277395, Q Loss: 666360.0908203125, Actor Loss: -46075.58642578125
Episode 6276: Time: 0.6182429790496826, Total Reward: 519.7652764972011, Q Loss: 1845280.3798828125, Actor Loss: -109724.89282226562
Episode 6277: Time: 0.7588536739349365, Total Reward: 640.7001905479782, Q Loss: 2482171.4462890625, Actor Loss: -132962.22827148438
Episode 6278: Time: 0.4772508144378662, Total Reward: 398.54098711225686, Q Loss: 1647608.5380859375, Actor Loss: -82941.05676269531
Episode 6279: Time: 0.7592649459838867, Total Reward: 639.8046628778726, Q Loss: 2063885.19140625, Actor Loss: -133221.3009033203
Episode 6280: Time: 0.1522829532623291, Total Reward: 119.18749385086689, Q Loss: 440001.9853515625, Actor Loss: -26671.7568359375
Episode 6281: Time: 0.19578886032104492, Total Reward: 156.17992728692596, Q Loss: 683219.9443359375, Actor Loss: -35211.99206542969
Episode 6282: Time: 0.379899263381958, Total Reward: 313.3798524784014, Q Loss: 1140290.9755859375, Actor Loss: -65826.85986328125
Episode 6283: Time: 0.26035499572753906, Total Reward: 212.59854471726734, Q Loss: 752658.4541015625, Actor Loss: -46146.794677734375
Episode 6284: Time: 0.10880494117736816, Total Reward: 81.71882621755296, Q Loss: 234788.3857421875, Actor Loss: -18383.159057617188
Episode 6285: Time: 0.36834239959716797, Total Reward: 304.91477858506346, Q Loss: 1031088.3564453125, Actor Loss: -65843.66943359375
Episode 6286: Time: 0.47736597061157227, Total Reward: 398.25684136228654, Q Loss: 1345447.025390625, Actor Loss: -85519.26843261719
Episode 6287: Time: 0.20642733573913574, Total Reward: 166.05068294361698, Q Loss: 621218.0810546875, Actor Loss: -38083.030517578125
Episode 6288: Time: 0.40088844299316406, Total Reward: 331.71821722228833, Q Loss: 1054323.236328125, Actor Loss: -71899.59875488281
Episode 6289: Time: 1.1381990909576416, Total Reward: 965.90327831481, Q Loss: 3598041.1811523438, Actor Loss: -201712.88537597656
Episode 6290: Time: 0.19629502296447754, Total Reward: 152.23048199647377, Q Loss: 633960.771484375, Actor Loss: -34849.667236328125
Episode 6291: Time: 0.12005782127380371, Total Reward: 91.19817318300426, Q Loss: 417570.587890625, Actor Loss: -20884.94384765625
Episode 6292: Time: 0.0762014389038086, Total Reward: 53.81301381662085, Q Loss: 260969.5029296875, Actor Loss: -13864.346557617188
Episode 6293: Time: 0.369229793548584, Total Reward: 303.5605174628424, Q Loss: 1107083.9814453125, Actor Loss: -66966.03039550781

Episode 6294: Time: 0.19544339179992676, Total Reward: 156.61572639674333, Q Loss: 523245.49609375, Actor Loss: -34552.87561035156
Episode 6295: Time: 0.3588409423828125, Total Reward: 295.7145531591503, Q Loss: 987757.0673828125, Actor Loss: -63165.68225097656
Episode 6296: Time: 0.9437730312347412, Total Reward: 798.6583397903274, Q Loss: 2664597.0263671875, Actor Loss: -168381.96997070312
Episode 6297: Time: 0.24991154670715332, Total Reward: 201.4532295285467, Q Loss: 823738.208984375, Actor Loss: -45273.13732910156
Episode 6298: Time: 0.5851078033447266, Total Reward: 491.4942508953755, Q Loss: 1884694.2626953125, Actor Loss: -105431.72399902344
Episode 6299: Time: 0.32531023025512695, Total Reward: 265.64462525152084, Q Loss: 972613.873046875, Actor Loss: -58174.292236328125
Validation Mean: 9355.357669778276, Validation Std: 0.9824871331961887
saving model
Episode 6300: Time: 0.30325794219970703, Total Reward: 240.4459128120795, Q Loss: 939193.953125, Actor Loss: -53011.4580078125
Episode 6301: Time: 0.29831886291503906, Total Reward: 239.74024716291953, Q Loss: 961524.970703125, Actor Loss: -51025.28649902344
Episode 6302: Time: 0.37288689613342285, Total Reward: 305.5798246150172, Q Loss: 1367675.3330078125, Actor Loss: -64579.02038574219
Episode 6303: Time: 0.31726551055908203, Total Reward: 257.0306108447234, Q Loss: 1021041.515625, Actor Loss: -55448.69372558594
Episode 6304: Time: 0.2728400230407715, Total Reward: 222.2166302529943, Q Loss: 1038330.8671875, Actor Loss: -48065.58605957031
Episode 6305: Time: 0.43549561500549316, Total Reward: 358.48023574997154, Q Loss: 1309439.3759765625, Actor Loss: -78958.91979980469
Episode 6306: Time: 0.10915422439575195, Total Reward: 81.59366546840955, Q Loss: 381823.9951171875, Actor Loss: -19042.331420898438
Episode 6307: Time: 0.6075766086578369, Total Reward: 508.8603327585313, Q Loss: 1688005.2939453125, Actor Loss: -107455.60314941406
Episode 6308: Time: 0.23957467079162598, Total Reward: 192.36911348297863, Q Loss: 799997.8388671875, Actor Loss: -41828.13244628906
Episode 6309: Time: 0.33733034133911133, Total Reward: 277.1476937656861, Q Loss: 1124512.669921875, Actor Loss: -59905.70751953125
Episode 6310: Time: 0.3148226737976074, Total Reward: 258.7593461051424, Q Loss: 931357.5673828125, Actor Loss: -56980.16882324219
Episode 6311: Time: 0.18489909172058105, Total Reward: 146.23179415487218, Q Loss: 681480.884765625, Actor Loss: -32468.047485351562
Episode 6312: Time: 0.36905670166015625, Total Reward: 305.6662655386591, Q Loss: 1183276.662109375, Actor Loss: -65461.087890625
Episode 6313: Time: 0.21763873100280762, Total Reward: 175.3341195599539, Q Loss: 645252.341796875, Actor Loss: -38654.82849121094
Episode 6314: Time: 0.25046563148498535, Total Reward: 203.48112492511052, Q Loss: 654640.0751953125, Actor Loss: -45738.79846191406
Episode 6315: Time: 0.3907759189605713, Total Reward: 323.77607977201137, Q Loss: 1123896.7734375, Actor Loss: -70506.03137207031
Episode 6316: Time: 0.29317736625671387, Total Reward: 239.6715144252359, Q Loss: 953271.1103515625, Actor Loss: -50302.05224609375
Episode 6317: Time: 0.33649492263793945, Total Reward: 277.14292639228773, Q Loss: 1059010.912109375, Actor Loss: -61483.69885253906
Episode 6318: Time: 0.4124734401702881, Total Reward: 342.4501470047475, Q Loss: 1216194.462890625, Actor Loss: -74551.99304199219
Episode 6319: Time: 0.4663715362548828, Total Reward: 385.5865258587485, Q Loss: 1452802.8852539062, Actor Loss: -83327.26403808594
Episode 6320: Time: 0.3268611431121826, Total Reward: 267.77439747296523, Q Loss: 862361.4794921875, Actor Loss: -59125.63488769531

Episode 6321: Time: 0.39070844650268555, Total Reward: 324.0814403026705, Q Loss: 1419863.287109375, Actor Loss: -68544.56396484375
Episode 6322: Time: 0.08717584609985352, Total Reward: 63.1273461531968, Q Loss: 234837.98046875, Actor Loss: -16268.683349609375
Episode 6323: Time: 0.26081252098083496, Total Reward: 209.83293217204783, Q Loss: 1020580.462890625, Actor Loss: -46924.89685058594
Episode 6324: Time: 0.2601947784423828, Total Reward: 212.0875421961742, Q Loss: 783868.74609375, Actor Loss: -47396.18225097656
Episode 6325: Time: 0.379410982131958, Total Reward: 315.2815209092685, Q Loss: 1305391.2421875, Actor Loss: -67672.75524902344
Episode 6326: Time: 0.3038949966430664, Total Reward: 249.67161696044786, Q Loss: 845586.0322265625, Actor Loss: -55814.748291015625
Episode 6327: Time: 0.23907160758972168, Total Reward: 193.41969355151355, Q Loss: 688295.3466796875, Actor Loss: -42068.46142578125
Episode 6328: Time: 0.2714359760284424, Total Reward: 220.03196806866836, Q Loss: 893173.912109375, Actor Loss: -49583.73046875
Episode 6329: Time: 0.30472397804260254, Total Reward: 248.87146381015432, Q Loss: 868620.2822265625, Actor Loss: -53129.39318847656
Episode 6330: Time: 0.11956501007080078, Total Reward: 91.18169905964223, Q Loss: 305490.6669921875, Actor Loss: -22224.92236328125
Episode 6331: Time: 0.184739351272583, Total Reward: 146.50320349108654, Q Loss: 561735.576171875, Actor Loss: -31451.591796875
Episode 6332: Time: 0.433591365814209, Total Reward: 361.4183177238055, Q Loss: 1535963.107421875, Actor Loss: -79711.3251953125
Episode 6333: Time: 0.40125370025634766, Total Reward: 331.9299762343476, Q Loss: 1383422.685546875, Actor Loss: -73066.02758789062
Episode 6334: Time: 0.20624876022338867, Total Reward: 166.42296647725155, Q Loss: 564903.5302734375, Actor Loss: -36291.74523925781
Episode 6335: Time: 0.09765052795410156, Total Reward: 72.6273613495277, Q Loss: 393132.140625, Actor Loss: -17368.38232421875
Episode 6336: Time: 0.17381072044372559, Total Reward: 137.516522716732, Q Loss: 605234.1484375, Actor Loss: -30397.1923828125
Episode 6337: Time: 0.08708977699279785, Total Reward: 63.34923232208284, Q Loss: 265155.8203125, Actor Loss: -15696.881469726562
Episode 6338: Time: 0.596203088760376, Total Reward: 499.50603963362477, Q Loss: 2089495.302734375, Actor Loss: -108710.95324707031
Episode 6339: Time: 0.20661020278930664, Total Reward: 164.5848090391013, Q Loss: 510417.7080078125, Actor Loss: -36911.33288574219
Episode 6340: Time: 0.412212610244751, Total Reward: 341.0326887103871, Q Loss: 1496856.650390625, Actor Loss: -75072.83508300781
Episode 6341: Time: 0.5847904682159424, Total Reward: 492.90011929542976, Q Loss: 2218320.0107421875, Actor Loss: -105894.17590332031
Episode 6342: Time: 0.32543158531188965, Total Reward: 266.1385870645928, Q Loss: 1114181.5087890625, Actor Loss: -59822.86669921875
Episode 6343: Time: 0.3363971710205078, Total Reward: 276.71509212981823, Q Loss: 1240287.376953125, Actor Loss: -61325.84228515625
Episode 6344: Time: 0.21787333488464355, Total Reward: 174.82620712717784, Q Loss: 590127.99609375, Actor Loss: -38436.705078125
Episode 6345: Time: 0.3257720470428467, Total Reward: 265.0922520805543, Q Loss: 1103835.0703125, Actor Loss: -57630.65051269531
Episode 6346: Time: 0.2928481101989746, Total Reward: 240.00176535988172, Q Loss: 839608.1171875, Actor Loss: -53923.627685546875
Episode 6347: Time: 0.2931854724884033, Total Reward: 239.98718115786846, Q Loss: 1059158.2060546875, Actor Loss: -53987.281494140625
Episode 6348: Time: 0.8555710315704346, Total Reward: 722.0700301877258, Q Loss: 3035667.5029296875, Actor Loss: -155809.6240234375

Episode 6349: Time: 0.36942458152770996, Total Reward: 305.6247278297331, Q Loss: 1202563.126953125, Actor Loss: -68864.29418945312
Episode 6350: Time: 0.477170467376709, Total Reward: 398.169964937892, Q Loss: 1582059.138671875, Actor Loss: -86306.69592285156
Episode 6351: Time: 0.19587492942810059, Total Reward: 156.0184671039582, Q Loss: 591470.453125, Actor Loss: -35775.618408203125
Episode 6352: Time: 0.15236711502075195, Total Reward: 119.13566752295797, Q Loss: 456346.3125, Actor Loss: -28634.097900390625
Episode 6353: Time: 0.466372013092041, Total Reward: 389.5758266922318, Q Loss: 1599680.0107421875, Actor Loss: -84530.23474121094
Episode 6354: Time: 0.28208208084106445, Total Reward: 229.79546723740907, Q Loss: 998520.4638671875, Actor Loss: -52280.477294921875
Episode 6355: Time: 0.7162747383117676, Total Reward: 601.9872775836086, Q Loss: 2637515.3984375, Actor Loss: -128822.75915527344
Episode 6356: Time: 0.23945069313049316, Total Reward: 192.40197748096506, Q Loss: 1006015.6708984375, Actor Loss: -44847.084716796875
Episode 6357: Time: 0.19556069374084473, Total Reward: 155.78489618818537, Q Loss: 512637.98388671875, Actor Loss: -36383.77868652344
Episode 6358: Time: 0.21837902069091797, Total Reward: 171.5168221403468, Q Loss: 880374.48828125, Actor Loss: -37622.11572265625
Episode 6359: Time: 0.7589139938354492, Total Reward: 640.8994008373442, Q Loss: 2987898.83203125, Actor Loss: -139893.80700683594
Episode 6360: Time: 0.21717047691345215, Total Reward: 175.07683977246666, Q Loss: 642665.4306640625, Actor Loss: -38879.74865722656
Episode 6361: Time: 0.5314967632293701, Total Reward: 442.99860548547707, Q Loss: 1763776.7646484375, Actor Loss: -98566.34313964844
Episode 6362: Time: 0.28290390968322754, Total Reward: 228.53205049319575, Q Loss: 1034022.73828125, Actor Loss: -51762.282470703125
Episode 6363: Time: 0.1736927032470703, Total Reward: 138.45084275719, Q Loss: 651902.580078125, Actor Loss: -31677.401489257812
Episode 6364: Time: 0.3473660945892334, Total Reward: 284.43137903102894, Q Loss: 1357654.814453125, Actor Loss: -64213.273681640625
Episode 6365: Time: 0.28217101097106934, Total Reward: 229.13001901871175, Q Loss: 1057429.9189453125, Actor Loss: -52899.43298339844
Episode 6366: Time: 0.4008829593658447, Total Reward: 333.38590880952273, Q Loss: 1556315.7705078125, Actor Loss: -75800.6904296875
Episode 6367: Time: 0.11999773979187012, Total Reward: 91.83165340129106, Q Loss: 417919.6259765625, Actor Loss: -21807.17822265625
Episode 6368: Time: 0.19608688354492188, Total Reward: 156.0088313294396, Q Loss: 604586.203125, Actor Loss: -36946.38623046875
Episode 6369: Time: 0.28229355812072754, Total Reward: 229.55024812358914, Q Loss: 1092541.0927734375, Actor Loss: -50614.34094238281
Episode 6370: Time: 0.7700867652893066, Total Reward: 648.4551437427901, Q Loss: 2802791.8046875, Actor Loss: -140704.0936279297
Episode 6371: Time: 0.33696961402893066, Total Reward: 276.11886727218854, Q Loss: 832428.2543945312, Actor Loss: -62936.51550292969
Episode 6372: Time: 0.7272660732269287, Total Reward: 613.2350706581717, Q Loss: 2543778.5712890625, Actor Loss: -132633.1435546875
Episode 6373: Time: 0.13052725791931152, Total Reward: 100.46243711862238, Q Loss: 326488.3837890625, Actor Loss: -23510.990356445312
Episode 6374: Time: 0.45612263679504395, Total Reward: 378.95174642109674, Q Loss: 1472225.7392578125, Actor Loss: -84667.85461425781
Episode 6375: Time: 0.14137887954711914, Total Reward: 109.89777207311064, Q Loss: 450424.6484375, Actor Loss: -26568.916137695312
Episode 6376: Time: 0.43492555618286133, Total Reward: 361.7338462103938, Q Loss: 1805857.712890625, Actor Loss: -79758.51928710938

Episode 6377: Time: 0.29387450218200684, Total Reward: 239.2757330404836, Q Loss: 817204.8173828125, Actor Loss: -52736.5859375
Episode 6378: Time: 0.17403769493103027, Total Reward: 137.98425060640741, Q Loss: 462798.0009765625, Actor Loss: -33719.15759277344
Episode 6379: Time: 0.1092376708984375, Total Reward: 81.63674400065392, Q Loss: 372838.056640625, Actor Loss: -19246.889282226562
Episode 6380: Time: 0.5868496894836426, Total Reward: 491.701327306051, Q Loss: 2163922.64453125, Actor Loss: -110556.67858886719
Episode 6381: Time: 0.10902523994445801, Total Reward: 81.60328699229497, Q Loss: 403649.564453125, Actor Loss: -20752.471313476562
Episode 6382: Time: 0.2828974723815918, Total Reward: 228.2546234877371, Q Loss: 932879.287109375, Actor Loss: -52126.437255859375
Episode 6383: Time: 0.10897636413574219, Total Reward: 81.46504972060306, Q Loss: 275817.4677734375, Actor Loss: -20046.672119140625
Episode 6384: Time: 0.71620774269104, Total Reward: 602.9672151096124, Q Loss: 2648243.0087890625, Actor Loss: -133676.2283935547
Episode 6385: Time: 0.4883594512939453, Total Reward: 407.4716086074509, Q Loss: 1615999.6044921875, Actor Loss: -91987.1943359375
Episode 6386: Time: 0.3912622928619385, Total Reward: 322.7075641336912, Q Loss: 1177777.6044921875, Actor Loss: -72482.44799804688
Episode 6387: Time: 0.31514978408813477, Total Reward: 259.00164529294307, Q Loss: 1010438.9541015625, Actor Loss: -58603.86315917969
Episode 6388: Time: 0.5096678733825684, Total Reward: 427.42771348292337, Q Loss: 2069487.9970703125, Actor Loss: -95360.86389160156
Episode 6389: Time: 0.8771488666534424, Total Reward: 741.5942774419235, Q Loss: 3102366.51171875, Actor Loss: -163116.48754882812
Episode 6390: Time: 0.3795919418334961, Total Reward: 314.6508966969316, Q Loss: 1236464.8803710938, Actor Loss: -69547.47058105469
Episode 6391: Time: 0.34759068489074707, Total Reward: 286.42086711271645, Q Loss: 1291885.0849609375, Actor Loss: -64834.22900390625
Episode 6392: Time: 0.8892624378204346, Total Reward: 750.2083682257704, Q Loss: 3465692.2783203125, Actor Loss: -164764.01037597656
Episode 6393: Time: 0.14127850532531738, Total Reward: 110.1368619682632, Q Loss: 677813.216796875, Actor Loss: -26344.580932617188
Episode 6394: Time: 0.3477439880371094, Total Reward: 285.9437920714201, Q Loss: 1040815.3134765625, Actor Loss: -65304.64855957031
Episode 6395: Time: 0.39085984230041504, Total Reward: 323.88387517456516, Q Loss: 1399369.7578125, Actor Loss: -73330.28198242188
Episode 6396: Time: 0.347261905670166, Total Reward: 286.99082352770216, Q Loss: 1198265.3076171875, Actor Loss: -65482.701416015625
Episode 6397: Time: 0.45497584342956543, Total Reward: 378.99605041383336, Q Loss: 1593902.6162109375, Actor Loss: -87418.66784667969
Episode 6398: Time: 0.6171185970306396, Total Reward: 519.0130136695725, Q Loss: 2256282.751953125, Actor Loss: -116336.13110351562
Episode 6399: Time: 0.43367624282836914, Total Reward: 361.07600426714436, Q Loss: 1514478.03125, Actor Loss: -80882.20227050781
Validation Mean: 9355.033264630427, Validation Std: 0.9218239933873618
saving model
Episode 6400: Time: 0.39290690422058105, Total Reward: 324.59545497659605, Q Loss: 1174686.4248046875, Actor Loss: -75869.44909667969
Episode 6401: Time: 0.2946052551269531, Total Reward: 238.48298184447214, Q Loss: 970617.4892578125, Actor Loss: -54598.17980957031
Episode 6402: Time: 0.27252984046936035, Total Reward: 220.96793793556162, Q Loss: 976402.4829101562, Actor Loss: -52050.868408203125
Episode 6403: Time: 0.25033092498779297, Total Reward: 202.6394123981311, Q Loss: 782630.681640625, Actor Loss: -46865.77233886719

Episode 6404: Time: 0.3256075382232666, Total Reward: 268.5022727634084, Q Loss: 1197228.34375, Actor Loss: -60701.72521972656
Episode 6405: Time: 0.42345690727233887, Total Reward: 352.79159427516214, Q Loss: 1264813.9892578125, Actor Loss: -82034.12854003906
Episode 6406: Time: 0.336073637008667, Total Reward: 277.25532617497606, Q Loss: 1271761.041015625, Actor Loss: -65248.402587890625
Episode 6407: Time: 0.36870861053466797, Total Reward: 304.85167876612, Q Loss: 1419297.033203125, Actor Loss: -68481.34680175781
Episode 6408: Time: 0.11939454078674316, Total Reward: 90.5872515509065, Q Loss: 500880.5693359375, Actor Loss: -23319.10888671875
Episode 6409: Time: 0.29394102096557617, Total Reward: 239.745424454718, Q Loss: 931914.677734375, Actor Loss: -55472.547119140625
Episode 6410: Time: 0.4782600402832031, Total Reward: 398.10556785301924, Q Loss: 1976837.4912109375, Actor Loss: -88979.56005859375
Episode 6411: Time: 0.2611536979675293, Total Reward: 212.37815916380893, Q Loss: 836471.2314453125, Actor Loss: -49343.91564941406
Episode 6412: Time: 0.45591139793395996, Total Reward: 377.4675894186212, Q Loss: 1719562.966796875, Actor Loss: -85885.44079589844
Episode 6413: Time: 0.6509597301483154, Total Reward: 545.7958187043649, Q Loss: 2355989.3779296875, Actor Loss: -125085.98229980469
Episode 6414: Time: 0.22820067405700684, Total Reward: 182.76368186346713, Q Loss: 751326.4921875, Actor Loss: -43281.9912109375
Episode 6415: Time: 0.24993610382080078, Total Reward: 203.7766333597185, Q Loss: 904703.1455078125, Actor Loss: -47679.42297363281
Episode 6416: Time: 0.34743571281433105, Total Reward: 286.0861225328947, Q Loss: 1219126.5888671875, Actor Loss: -65670.94201660156
Episode 6417: Time: 0.38095712661743164, Total Reward: 314.85081919755896, Q Loss: 1271398.4775390625, Actor Loss: -71060.29919433594
Episode 6418: Time: 0.20642399787902832, Total Reward: 164.8414255607892, Q Loss: 786724.40625, Actor Loss: -38204.57604980469
Episode 6419: Time: 0.22841644287109375, Total Reward: 184.7083550920256, Q Loss: 802152.197265625, Actor Loss: -44427.6279296875
Episode 6420: Time: 0.18462061882019043, Total Reward: 147.17770240910608, Q Loss: 619017.263671875, Actor Loss: -34854.722412109375
Episode 6421: Time: 0.488339900970459, Total Reward: 406.292321376904, Q Loss: 2030284.5107421875, Actor Loss: -94829.99816894531
Episode 6422: Time: 0.16317248344421387, Total Reward: 128.7041434353247, Q Loss: 540648.708984375, Actor Loss: -29953.238525390625
Episode 6423: Time: 0.18493914604187012, Total Reward: 147.0426048151675, Q Loss: 631351.828125, Actor Loss: -35025.318359375
Episode 6424: Time: 0.1636502742767334, Total Reward: 129.0932503473127, Q Loss: 606648.5078125, Actor Loss: -31793.50732421875
Episode 6425: Time: 0.12040209770202637, Total Reward: 91.34486525816288, Q Loss: 367919.6796875, Actor Loss: -22808.518676757812
Episode 6426: Time: 0.2730062007904053, Total Reward: 221.49888288423298, Q Loss: 947629.1201171875, Actor Loss: -52895.96923828125
Episode 6427: Time: 0.1308600902557373, Total Reward: 100.8208109540128, Q Loss: 383042.1328125, Actor Loss: -25354.053955078125
Episode 6428: Time: 0.20720958709716797, Total Reward: 166.0702937282077, Q Loss: 795842.833984375, Actor Loss: -39541.201416015625
Episode 6429: Time: 0.14161205291748047, Total Reward: 108.47039458525303, Q Loss: 448888.75, Actor Loss: -28041.472045898438
Episode 6430: Time: 0.1417708396911621, Total Reward: 110.21882336634913, Q Loss: 479811.421875, Actor Loss: -27291.824584960938
Episode 6431: Time: 0.3903028964996338, Total Reward: 322.1275869359828, Q Loss: 1416367.8486328125, Actor Loss: -73721.01306152344

Episode 6432: Time: 0.11952733993530273, Total Reward: 90.92156074318034, Q Loss: 397753.416015625, Actor Loss: -22742.750366210938
Episode 6433: Time: 0.29335737228393555, Total Reward: 240.02894233946117, Q Loss: 1274959.1010742188, Actor Loss: -56939.13977050781
Episode 6434: Time: 0.304196834564209, Total Reward: 250.19954407824073, Q Loss: 1076302.5087890625, Actor Loss: -57473.560791015625
Episode 6435: Time: 0.2607870101928711, Total Reward: 211.72452936498155, Q Loss: 787258.4423828125, Actor Loss: -49631.07080078125
Episode 6436: Time: 0.8562459945678711, Total Reward: 724.0752385580863, Q Loss: 3126331.5283203125, Actor Loss: -168022.4520263672
Episode 6437: Time: 0.3578360080718994, Total Reward: 295.9117277589722, Q Loss: 1324833.96875, Actor Loss: -70017.90222167969
Episode 6438: Time: 0.390824556350708, Total Reward: 324.2122672901604, Q Loss: 1433631.0224609375, Actor Loss: -75474.81945800781
Episode 6439: Time: 0.41236019134521484, Total Reward: 343.5602881036171, Q Loss: 1590800.79296875, Actor Loss: -80139.35388183594
Episode 6440: Time: 0.4018371105194092, Total Reward: 332.63048429769816, Q Loss: 1903285.3432617188, Actor Loss: -76839.3037109375
Episode 6441: Time: 1.07283616065979, Total Reward: 912.1036099117882, Q Loss: 4057019.8583984375, Actor Loss: -209783.2265625
Episode 6442: Time: 0.20766711235046387, Total Reward: 164.11491100747432, Q Loss: 808234.3793945312, Actor Loss: -38792.437744140625
Episode 6443: Time: 1.0503544807434082, Total Reward: 892.4829571169976, Q Loss: 3489939.8413085938, Actor Loss: -205770.30236816406
Episode 6444: Time: 0.30353283882141113, Total Reward: 246.45058974023513, Q Loss: 1062033.111328125, Actor Loss: -61157.82824707031
Episode 6445: Time: 0.14114761352539062, Total Reward: 109.79605640414066, Q Loss: 532463.255859375, Actor Loss: -27711.791625976562
Episode 6446: Time: 0.1633138656616211, Total Reward: 127.64743042773674, Q Loss: 650391.9365234375, Actor Loss: -32468.219116210938
Episode 6447: Time: 0.45647692680358887, Total Reward: 379.9789611691774, Q Loss: 1958814.216796875, Actor Loss: -87991.50146484375
Episode 6448: Time: 0.36879825592041016, Total Reward: 306.24185857341024, Q Loss: 1220517.0029296875, Actor Loss: -69510.22534179688
Episode 6449: Time: 0.6510639190673828, Total Reward: 546.6785558332814, Q Loss: 2503624.35546875, Actor Loss: -125610.94274902344
Episode 6450: Time: 0.6614253520965576, Total Reward: 553.4128950624525, Q Loss: 2174855.751953125, Actor Loss: -129706.42248535156
Episode 6451: Time: 0.6175756454467773, Total Reward: 517.8537943569136, Q Loss: 2086394.8559570312, Actor Loss: -120570.43762207031
Episode 6452: Time: 0.17381572723388672, Total Reward: 138.4624772733148, Q Loss: 867733.6953125, Actor Loss: -32850.529541015625
Episode 6453: Time: 0.17419886589050293, Total Reward: 138.18834620050777, Q Loss: 803740.953125, Actor Loss: -34143.994384765625
Episode 6454: Time: 0.19562983512878418, Total Reward: 156.32034646111532, Q Loss: 795203.416015625, Actor Loss: -38622.67919921875
Episode 6455: Time: 0.0983119010925293, Total Reward: 72.46071542778733, Q Loss: 389697.8232421875, Actor Loss: -18866.749267578125
Episode 6456: Time: 0.32569360733032227, Total Reward: 267.8062901056668, Q Loss: 1280840.5419921875, Actor Loss: -64166.67614746094
Episode 6457: Time: 0.6287398338317871, Total Reward: 530.1575048894157, Q Loss: 2128517.8349609375, Actor Loss: -123951.87976074219
Episode 6458: Time: 0.09772634506225586, Total Reward: 72.98731906876921, Q Loss: 527490.55078125, Actor Loss: -18378.916870117188
Episode 6459: Time: 0.4335794448852539, Total Reward: 360.3636946279298, Q Loss: 2015518.1181640625, Actor Loss: -85614.83264160156

Episode 6460: Time: 0.3363940715789795, Total Reward: 277.2448220318783, Q Loss: 1313386.2255859375, Actor Loss: -64957.361572265625
Episode 6461: Time: 0.9101431369781494, Total Reward: 771.2710380522576, Q Loss: 3536294.9013671875, Actor Loss: -178894.09704589844
Episode 6462: Time: 0.26074767112731934, Total Reward: 211.17979107996402, Q Loss: 903915.6875, Actor Loss: -50440.37341308594
Episode 6463: Time: 0.14130258560180664, Total Reward: 109.40353689368249, Q Loss: 584160.44921875, Actor Loss: -27319.759155273438
Episode 6464: Time: 0.3903944492340088, Total Reward: 323.224327962406, Q Loss: 1741813.5068359375, Actor Loss: -77241.03833007812
Episode 6465: Time: 0.1952509880065918, Total Reward: 155.09162671912725, Q Loss: 739601.5283203125, Actor Loss: -39278.20837402344
Episode 6466: Time: 0.3476526737213135, Total Reward: 285.9739782192854, Q Loss: 1496570.3623046875, Actor Loss: -67334.22131347656
Episode 6467: Time: 0.18457627296447754, Total Reward: 147.10974144308707, Q Loss: 661558.873046875, Actor Loss: -35022.634033203125
Episode 6468: Time: 0.27197813987731934, Total Reward: 220.91022008032652, Q Loss: 996174.9091796875, Actor Loss: -52866.77294921875
Episode 6469: Time: 0.14118313789367676, Total Reward: 109.9321747065607, Q Loss: 649540.884765625, Actor Loss: -27407.904907226562
Episode 6470: Time: 0.42330408096313477, Total Reward: 350.89822769814896, Q Loss: 2006596.6865234375, Actor Loss: -82325.25
Episode 6471: Time: 0.3584291934967041, Total Reward: 294.19788513326444, Q Loss: 1380362.3310546875, Actor Loss: -69969.95739746094
Episode 6472: Time: 0.2934989929199219, Total Reward: 239.2980784253885, Q Loss: 898930.0087890625, Actor Loss: -57630.36474609375
Episode 6473: Time: 0.2495872974395752, Total Reward: 202.48542646332652, Q Loss: 982691.1748046875, Actor Loss: -49632.41247558594
Episode 6474: Time: 0.61802077293396, Total Reward: 518.6891961874572, Q Loss: 2296586.6884765625, Actor Loss: -122711.04138183594
Episode 6475: Time: 0.5859725475311279, Total Reward: 490.11092928442883, Q Loss: 2604600.939453125, Actor Loss: -117546.14636230469
Episode 6476: Time: 0.22824764251708984, Total Reward: 183.95318831312915, Q Loss: 837059.7705078125, Actor Loss: -44061.389892578125
Episode 6477: Time: 0.10903048515319824, Total Reward: 82.09856827408667, Q Loss: 457786.416015625, Actor Loss: -21071.1005859375
Episode 6478: Time: 0.5316915512084961, Total Reward: 441.48131407113704, Q Loss: 2342983.7021484375, Actor Loss: -105266.6162109375
Episode 6479: Time: 0.2500739097595215, Total Reward: 203.0758291179421, Q Loss: 1027376.7021484375, Actor Loss: -49372.87512207031
Episode 6480: Time: 0.2940347194671631, Total Reward: 237.94073719082294, Q Loss: 1161438.634765625, Actor Loss: -55872.072021484375
Episode 6481: Time: 0.2503488063812256, Total Reward: 202.95221155046815, Q Loss: 839687.6162109375, Actor Loss: -48553.025390625
Episode 6482: Time: 0.379901647567749, Total Reward: 314.7223071466583, Q Loss: 1569719.4384765625, Actor Loss: -73725.48779296875
Episode 6483: Time: 0.6284713745117188, Total Reward: 529.1872805854804, Q Loss: 2657976.9892578125, Actor Loss: -127479.83251953125
Episode 6484: Time: 0.26022982597351074, Total Reward: 210.994942547713, Q Loss: 1078265.251953125, Actor Loss: -53228.50988769531
Episode 6485: Time: 0.09774303436279297, Total Reward: 72.56342960498591, Q Loss: 312899.7734375, Actor Loss: -20451.029052734375
Episode 6486: Time: 0.27147459983825684, Total Reward: 220.19287233582108, Q Loss: 1359340.67578125, Actor Loss: -54574.33728027344
Episode 6487: Time: 0.4994666576385498, Total Reward: 416.93880158842927, Q Loss: 1721952.857421875, Actor Loss: -99025.273681640625

Episode 6488: Time: 0.17414188385009766, Total Reward: 138.00657647622415, Q Loss: 632951.9189453125, Actor Loss: -34755.21350097656
Episode 6489: Time: 0.34740686416625977, Total Reward: 287.11207144832383, Q Loss: 1231123.51953125, Actor Loss: -67557.30249023438
Episode 6490: Time: 0.41401171684265137, Total Reward: 341.34901289251536, Q Loss: 1561062.4228515625, Actor Loss: -82574.3818359375
Episode 6491: Time: 0.12024760246276855, Total Reward: 91.52063080325647, Q Loss: 584406.4609375, Actor Loss: -24815.19384765625
Episode 6492: Time: 0.7934515476226807, Total Reward: 668.01642765521, Q Loss: 2906711.6748046875, Actor Loss: -163045.73461914062
Episode 6493: Time: 0.23955821990966797, Total Reward: 193.68871747985847, Q Loss: 855589.4970703125, Actor Loss: -47469.57409667969
Episode 6494: Time: 0.15240931510925293, Total Reward: 116.38157460542102, Q Loss: 439797.59375, Actor Loss: -29250.9658203125
Episode 6495: Time: 0.2608938217163086, Total Reward: 211.77039971943188, Q Loss: 1054726.35546875, Actor Loss: -51865.32092285156
Episode 6496: Time: 0.3477203845977783, Total Reward: 284.4842338161959, Q Loss: 1682090.2626953125, Actor Loss: -69717.72717285156
Episode 6497: Time: 0.16327500343322754, Total Reward: 128.62749684327122, Q Loss: 451257.486328125, Actor Loss: -31462.48974609375
Episode 6498: Time: 0.3477790355682373, Total Reward: 284.94218491207545, Q Loss: 1247977.939453125, Actor Loss: -68099.94165039062
Episode 6499: Time: 0.3378722667694092, Total Reward: 276.5764190635772, Q Loss: 1431663.314453125, Actor Loss: -68131.93017578125
Validation Mean: 9355.287601638127, Validation Std: 0.5432721765042965
saving model
Episode 6500: Time: 0.25184202194213867, Total Reward: 202.7695317602926, Q Loss: 1229031.240234375, Actor Loss: -49905.20520019531
Episode 6501: Time: 0.5426688194274902, Total Reward: 454.2143914394872, Q Loss: 2598694.337890625, Actor Loss: -105521.15893554688
Episode 6502: Time: 0.42360424995422363, Total Reward: 350.94641245266905, Q Loss: 1504354.431640625, Actor Loss: -83834.26696777344
Episode 6503: Time: 0.3371713161468506, Total Reward: 276.46274195011887, Q Loss: 1306263.515625, Actor Loss: -68666.5029296875
Episode 6504: Time: 0.14122462272644043, Total Reward: 110.31824372725222, Q Loss: 552605.03515625, Actor Loss: -29090.448974609375
Episode 6505: Time: 0.45583319664001465, Total Reward: 378.33478203477483, Q Loss: 1852700.64453125, Actor Loss: -92611.513671875
Episode 6506: Time: 0.3153355121612549, Total Reward: 256.40715439772043, Q Loss: 1274855.45703125, Actor Loss: -62630.17138671875
Episode 6507: Time: 0.2064673900604248, Total Reward: 165.1044139446876, Q Loss: 662571.248046875, Actor Loss: -40636.53918457031
Episode 6508: Time: 0.3259854316711426, Total Reward: 268.25945274288716, Q Loss: 1223835.271484375, Actor Loss: -66434.36755371094
Episode 6509: Time: 0.4883859157562256, Total Reward: 407.54684145163867, Q Loss: 1981144.15234375, Actor Loss: -99146.69140625
Episode 6510: Time: 0.6314094066619873, Total Reward: 529.603279354939, Q Loss: 2893022.24609375, Actor Loss: -124668.00500488281
Episode 6511: Time: 0.32578372955322266, Total Reward: 266.9105624027738, Q Loss: 1471335.205078125, Actor Loss: -66666.35705566406
Episode 6512: Time: 0.29354166984558105, Total Reward: 239.5685757400648, Q Loss: 1198004.921875, Actor Loss: -59690.82275390625
Episode 6513: Time: 0.25032925605773926, Total Reward: 202.78636322959295, Q Loss: 989709.658203125, Actor Loss: -49975.8671875
Episode 6514: Time: 0.10879302024841309, Total Reward: 81.66365912795368, Q Loss: 236719.921875, Actor Loss: -21617.841674804688

Episode 6515: Time: 0.3584883213043213, Total Reward: 295.17850809771363, Q Loss: 1414337.1845703125, Actor Loss: -73604.26245117188
Episode 6516: Time: 0.09794402122497559, Total Reward: 72.63432993977361, Q Loss: 338626.015625, Actor Loss: -19754.285400390625
Episode 6517: Time: 0.4344661235809326, Total Reward: 359.4718369161133, Q Loss: 1540002.453125, Actor Loss: -89488.34484863281
Episode 6518: Time: 0.09797334671020508, Total Reward: 72.51309813524303, Q Loss: 411620.056640625, Actor Loss: -19129.80029296875
Episode 6519: Time: 0.6942543983459473, Total Reward: 583.69230968305, Q Loss: 3226027.814453125, Actor Loss: -139396.15759277344
Episode 6520: Time: 0.3148691654205322, Total Reward: 258.18365004618533, Q Loss: 1196273.583984375, Actor Loss: -62721.21520996094
Episode 6521: Time: 0.2286701202392578, Total Reward: 183.71809736032375, Q Loss: 1220986.80078125, Actor Loss: -45754.69140625
Episode 6522: Time: 0.18436837196350098, Total Reward: 146.37061787555842, Q Loss: 771694.560546875, Actor Loss: -37739.91320800781
Episode 6523: Time: 0.27170896530151367, Total Reward: 217.08548263784866, Q Loss: 822939.279296875, Actor Loss: -56581.939453125
Episode 6524: Time: 0.16306138038635254, Total Reward: 128.8499518080899, Q Loss: 776883.451171875, Actor Loss: -33969.59362792969
Episode 6525: Time: 0.13102293014526367, Total Reward: 100.80902699858653, Q Loss: 557970.62890625, Actor Loss: -26741.74267578125
Episode 6526: Time: 0.13050580024719238, Total Reward: 99.83653650690394, Q Loss: 647085.7109375, Actor Loss: -27271.031982421875
Episode 6527: Time: 0.38025569915771484, Total Reward: 313.5082056711776, Q Loss: 1746841.673828125, Actor Loss: -78322.91870117188
Episode 6528: Time: 0.2175006866455078, Total Reward: 174.2353453731941, Q Loss: 703033.1474609375, Actor Loss: -43633.91516113281
Episode 6529: Time: 0.30483150482177734, Total Reward: 246.58041416923024, Q Loss: 1135883.8037109375, Actor Loss: -62093.63000488281
Episode 6530: Time: 0.19567322731018066, Total Reward: 157.23406844510353, Q Loss: 649248.837890625, Actor Loss: -39829.58581542969
Episode 6531: Time: 0.1308121681213379, Total Reward: 100.26144352153243, Q Loss: 469500.9453125, Actor Loss: -27781.43603515625
Episode 6532: Time: 0.44560885429382324, Total Reward: 369.3048742223293, Q Loss: 1888119.521484375, Actor Loss: -93128.86926269531
Episode 6533: Time: 0.4451272487640381, Total Reward: 370.653405855319, Q Loss: 1977446.916015625, Actor Loss: -89326.79248046875
Episode 6534: Time: 0.09790349006652832, Total Reward: 72.9103313097266, Q Loss: 431239.05078125, Actor Loss: -20127.054565429688
Episode 6535: Time: 0.3478374481201172, Total Reward: 284.85413013709314, Q Loss: 1449599.1552734375, Actor Loss: -70263.90625
Episode 6536: Time: 0.6938514709472656, Total Reward: 583.0334501505996, Q Loss: 2666411.3779296875, Actor Loss: -139430.20935058594
Episode 6537: Time: 0.28226709365844727, Total Reward: 231.14451063231695, Q Loss: 981991.0283203125, Actor Loss: -56999.33654785156
Episode 6538: Time: 0.1953890323638916, Total Reward: 156.14165892628864, Q Loss: 937547.154296875, Actor Loss: -39803.454345703125
Episode 6539: Time: 0.48891544342041016, Total Reward: 407.41761090197105, Q Loss: 1936158.9521484375, Actor Loss: -98363.61108398438
Episode 6540: Time: 0.29335927963256836, Total Reward: 238.81409106279983, Q Loss: 1299102.796875, Actor Loss: -61065.19970703125
Episode 6541: Time: 0.25008463859558105, Total Reward: 202.5384240839586, Q Loss: 1011652.275390625, Actor Loss: -51763.49865722656
Episode 6542: Time: 0.1521191162109375, Total Reward: 119.24532139898373, Q Loss: 765176.6669921875, Actor Loss: -31935.898803710938

Episode 6543: Time: 0.0987386703491211, Total Reward: 71.84654470583224, Q Loss: 311309.6904296875, Actor Loss: -19290.71337890625
Episode 6544: Time: 0.15192198753356934, Total Reward: 119.35740726431816, Q Loss: 680685.701171875, Actor Loss: -31600.052001953125
Episode 6545: Time: 0.31507372856140137, Total Reward: 257.1100622101789, Q Loss: 1292256.50390625, Actor Loss: -65418.38342285156
Episode 6546: Time: 0.33756184577941895, Total Reward: 273.82727414727384, Q Loss: 1560961.8154296875, Actor Loss: -69062.55017089844
Episode 6547: Time: 0.4556567668914795, Total Reward: 377.9624794917305, Q Loss: 2000202.228515625, Actor Loss: -91801.73291015625
Episode 6548: Time: 0.38129520416259766, Total Reward: 314.7997355923977, Q Loss: 1665344.015625, Actor Loss: -76981.80456542969
Episode 6549: Time: 0.20679426193237305, Total Reward: 166.13758389729122, Q Loss: 851926.8212890625, Actor Loss: -42727.31335449219
Episode 6550: Time: 0.32598090171813965, Total Reward: 267.71540626089285, Q Loss: 1237004.009765625, Actor Loss: -65792.15368652344
Episode 6551: Time: 0.1739482879638672, Total Reward: 137.06987594079078, Q Loss: 575750.357421875, Actor Loss: -36359.2109375
Episode 6552: Time: 0.16378188133239746, Total Reward: 127.89881049435999, Q Loss: 482535.6220703125, Actor Loss: -33720.08154296875
Episode 6553: Time: 0.18477201461791992, Total Reward: 146.95854708348284, Q Loss: 894673.73828125, Actor Loss: -39236.38928222656
Episode 6554: Time: 0.6402080059051514, Total Reward: 535.7708916972048, Q Loss: 3222536.1552734375, Actor Loss: -132136.8623046875
Episode 6555: Time: 0.17396879196166992, Total Reward: 138.20511108285675, Q Loss: 637161.53515625, Actor Loss: -35007.422607421875
Episode 6556: Time: 0.25024962425231934, Total Reward: 202.96482261148395, Q Loss: 955980.630859375, Actor Loss: -50534.185791015625
Episode 6557: Time: 0.5421562194824219, Total Reward: 453.82174105630975, Q Loss: 2422684.537109375, Actor Loss: -112509.01281738281
Episode 6558: Time: 0.17363762855529785, Total Reward: 137.40090405260236, Q Loss: 672147.359375, Actor Loss: -36146.80822753906
Episode 6559: Time: 0.3585503101348877, Total Reward: 294.51893116033625, Q Loss: 1689133.3125, Actor Loss: -72782.24719238281
Episode 6560: Time: 0.2932252883911133, Total Reward: 239.9992691861591, Q Loss: 1194395.0703125, Actor Loss: -59505.694091796875
Episode 6561: Time: 0.34825682640075684, Total Reward: 285.9183333990418, Q Loss: 1743154.10546875, Actor Loss: -71782.86401367188
Episode 6562: Time: 0.15262198448181152, Total Reward: 119.65094112146315, Q Loss: 666787.3115234375, Actor Loss: -29826.292358398438
Episode 6563: Time: 0.5325150489807129, Total Reward: 443.4697014401002, Q Loss: 2208480.29296875, Actor Loss: -108706.63537597656
Episode 6564: Time: 0.30466175079345703, Total Reward: 248.85262121857753, Q Loss: 1372888.2822265625, Actor Loss: -61847.051513671875
Episode 6565: Time: 0.32655906677246094, Total Reward: 267.8535589611797, Q Loss: 1179998.3896484375, Actor Loss: -68730.81945800781
Episode 6566: Time: 0.3261222839355469, Total Reward: 268.2571049331381, Q Loss: 1275924.9521484375, Actor Loss: -68001.23425292969
Episode 6567: Time: 0.09800410270690918, Total Reward: 72.56055242425974, Q Loss: 519172.154296875, Actor Loss: -20859.8740234375
Episode 6568: Time: 0.1526346206665039, Total Reward: 119.71499094991273, Q Loss: 511971.4052734375, Actor Loss: -31459.621337890625
Episode 6569: Time: 0.26099538803100586, Total Reward: 211.63231474394624, Q Loss: 939925.345703125, Actor Loss: -53921.22399902344
Episode 6570: Time: 0.35799551010131836, Total Reward: 296.5007799524146, Q Loss: 1362340.11328125, Actor Loss: -72725.26867675781

Episode 6571: Time: 0.09807872772216797, Total Reward: 72.79919254019363, Q Loss: 327917.8349609375, Actor Loss: -20901.884765625
Episode 6572: Time: 0.4894285202026367, Total Reward: 408.02381770203556, Q Loss: 2266683.92578125, Actor Loss: -101554.37048339844
Episode 6573: Time: 0.1630399227142334, Total Reward: 127.8672827330912, Q Loss: 698115.0, Actor Loss: -33840.256103515625
Episode 6574: Time: 0.26088380813598633, Total Reward: 212.610003403271, Q Loss: 1344114.236328125, Actor Loss: -53120.30419921875
Episode 6575: Time: 0.8781583309173584, Total Reward: 742.2785940890026, Q Loss: 3750231.193359375, Actor Loss: -180336.7784423828
Episode 6576: Time: 0.17354702949523926, Total Reward: 137.46829229242414, Q Loss: 710373.4375, Actor Loss: -35759.74499511719
Episode 6577: Time: 0.26099562644958496, Total Reward: 211.33784176351574, Q Loss: 1029279.6630859375, Actor Loss: -53174.74694824219
Episode 6578: Time: 0.1196904182434082, Total Reward: 91.19616979939832, Q Loss: 659069.21484375, Actor Loss: -24315.6591796875
Episode 6579: Time: 0.10942745208740234, Total Reward: 81.85421139145193, Q Loss: 405161.0205078125, Actor Loss: -23715.215087890625
Episode 6580: Time: 0.27259182929992676, Total Reward: 219.35057708664255, Q Loss: 1380238.28515625, Actor Loss: -58481.336669921875
Episode 6581: Time: 0.22830533981323242, Total Reward: 183.21080800978882, Q Loss: 1008339.3173828125, Actor Loss: -46373.90576171875
Episode 6582: Time: 0.45598697662353516, Total Reward: 378.65902001450905, Q Loss: 1905761.05859375, Actor Loss: -96934.58154296875
Episode 6583: Time: 0.14143753051757812, Total Reward: 109.99315555512486, Q Loss: 540490.5146484375, Actor Loss: -30146.90283203125
Episode 6584: Time: 0.1093897819519043, Total Reward: 81.75275824834436, Q Loss: 497695.5185546875, Actor Loss: -21314.052978515625
Episode 6585: Time: 0.3699202537536621, Total Reward: 305.29916129094505, Q Loss: 1550856.603515625, Actor Loss: -76222.48034667969
Episode 6586: Time: 0.564223051071167, Total Reward: 471.9375583238627, Q Loss: 2551828.7470703125, Actor Loss: -117160.240234375
Episode 6587: Time: 0.2610132694244385, Total Reward: 208.9920841613147, Q Loss: 1240834.939453125, Actor Loss: -55047.02282714844
Episode 6588: Time: 0.39194750785827637, Total Reward: 323.5400246272756, Q Loss: 1727002.5986328125, Actor Loss: -78725.650390625
Episode 6589: Time: 0.2288041114807129, Total Reward: 184.4844864959302, Q Loss: 1204322.0439453125, Actor Loss: -46607.476806640625
Episode 6590: Time: 0.901047945022583, Total Reward: 761.3608513905388, Q Loss: 4353348.6240234375, Actor Loss: -189660.837890625
Episode 6591: Time: 0.3045952320098877, Total Reward: 250.20933889468435, Q Loss: 1254845.220703125, Actor Loss: -63089.202392578125
Episode 6592: Time: 0.7597768306732178, Total Reward: 641.4748151530673, Q Loss: 3342502.1259765625, Actor Loss: -158558.58374023438
Episode 6593: Time: 0.21792221069335938, Total Reward: 173.04640221166574, Q Loss: 932518.6796875, Actor Loss: -44394.003173828125
Episode 6594: Time: 0.8562228679656982, Total Reward: 723.9120065157546, Q Loss: 4129250.412109375, Actor Loss: -181820.0743408203
Episode 6595: Time: 0.18450236320495605, Total Reward: 146.48327939462305, Q Loss: 771830.326171875, Actor Loss: -39545.12268066406
Episode 6596: Time: 0.30419087409973145, Total Reward: 248.56980277523766, Q Loss: 1239361.75390625, Actor Loss: -65291.080078125
Episode 6597: Time: 0.29352283477783203, Total Reward: 239.67011113525845, Q Loss: 1425740.4111328125, Actor Loss: -61378.31396484375
Episode 6598: Time: 0.34775257110595703, Total Reward: 286.21598502210026, Q Loss: 1450101.8125, Actor Loss: -73328.17651367188

Episode 6599: Time: 0.29362034797668457, Total Reward: 239.07513444848993, Q Loss: 1630089.36328125, Actor Loss: -61789.94873046875
Validation Mean: 9355.67897402771, Validation Std: 0.7311685913604228
saving model
Episode 6600: Time: 0.14279699325561523, Total Reward: 110.07237207346691, Q Loss: 617493.1826171875, Actor Loss: -30213.189697265625
Episode 6601: Time: 0.3155033588409424, Total Reward: 259.0518943063019, Q Loss: 1198711.556640625, Actor Loss: -66929.90954589844
Episode 6602: Time: 0.21794772148132324, Total Reward: 173.68846978989822, Q Loss: 1006337.5029296875, Actor Loss: -44469.38610839844
Episode 6603: Time: 0.3911168575286865, Total Reward: 324.58413461534616, Q Loss: 1588567.49609375, Actor Loss: -82628.53173828125
Episode 6604: Time: 0.30442047119140625, Total Reward: 248.21918511573347, Q Loss: 1321551.7255859375, Actor Loss: -64428.51025390625
Episode 6605: Time: 0.2929878234863281, Total Reward: 239.92528307226226, Q Loss: 1295507.595703125, Actor Loss: -61150.8583984375
Episode 6606: Time: 0.2825782299041748, Total Reward: 230.86578532035676, Q Loss: 1550498.435546875, Actor Loss: -59821.027099609375
Episode 6607: Time: 0.24985527992248535, Total Reward: 202.14736537530933, Q Loss: 1036179.201171875, Actor Loss: -53166.15319824219
Episode 6608: Time: 0.14121699333190918, Total Reward: 110.1350647689608, Q Loss: 677257.669921875, Actor Loss: -29891.317626953125
Episode 6609: Time: 0.1308591365814209, Total Reward: 100.86714585166712, Q Loss: 508911.802734375, Actor Loss: -28320.99267578125
Episode 6610: Time: 0.38039660453796387, Total Reward: 314.6628218676012, Q Loss: 1769809.2978515625, Actor Loss: -79734.73522949219
Episode 6611: Time: 0.43453216552734375, Total Reward: 360.16400032384126, Q Loss: 2362609.3994140625, Actor Loss: -94296.61730957031
Episode 6612: Time: 0.11957263946533203, Total Reward: 91.50089540393057, Q Loss: 456469.58203125, Actor Loss: -24387.484375
Episode 6613: Time: 0.3152616024017334, Total Reward: 255.7639963357053, Q Loss: 1398767.38671875, Actor Loss: -66779.68237304688
Episode 6614: Time: 0.4889194965362549, Total Reward: 407.2027232338528, Q Loss: 2085006.62109375, Actor Loss: -102416.95422363281
Episode 6615: Time: 0.49906396865844727, Total Reward: 416.14357828722393, Q Loss: 2286437.8310546875, Actor Loss: -106068.32885742188
Episode 6616: Time: 0.22836589813232422, Total Reward: 184.16991764498863, Q Loss: 900070.6650390625, Actor Loss: -46000.10266113281
Episode 6617: Time: 0.31531476974487305, Total Reward: 258.8719667492884, Q Loss: 1531031.39453125, Actor Loss: -69653.78918457031
Episode 6618: Time: 0.41291022300720215, Total Reward: 340.1265310536961, Q Loss: 2172850.5029296875, Actor Loss: -88942.56225585938
Episode 6619: Time: 0.5866742134094238, Total Reward: 489.90077027562796, Q Loss: 2686117.66015625, Actor Loss: -122461.03479003906
Episode 6620: Time: 0.17429876327514648, Total Reward: 137.99159543289738, Q Loss: 811437.740234375, Actor Loss: -36826.696044921875
Episode 6621: Time: 0.13101744651794434, Total Reward: 100.59107620872784, Q Loss: 667219.20703125, Actor Loss: -26999.936401367188
Episode 6622: Time: 0.20692086219787598, Total Reward: 164.97331582108993, Q Loss: 1020482.609375, Actor Loss: -44299.78369140625
Episode 6623: Time: 0.2505667209625244, Total Reward: 201.91318353177533, Q Loss: 977134.916015625, Actor Loss: -52849.12927246094
Episode 6624: Time: 0.6841232776641846, Total Reward: 575.172111403207, Q Loss: 3171572.2841796875, Actor Loss: -142873.3973388672
Episode 6625: Time: 0.5101838111877441, Total Reward: 425.05102903946533, Q Loss: 2400272.2353515625, Actor Loss: -108395.25048828125

Episode 6626: Time: 0.28241920471191406, Total Reward: 230.50408057796403, Q Loss: 1296286.154296875, Actor Loss: -60261.58361816406
Episode 6627: Time: 0.5544474124908447, Total Reward: 462.695856062415, Q Loss: 2265229.6962890625, Actor Loss: -118298.83471679688
Episode 6628: Time: 0.14189410209655762, Total Reward: 109.49429672850381, Q Loss: 643813.5625, Actor Loss: -30817.208251953125
Episode 6629: Time: 0.3379034996032715, Total Reward: 275.4361044848804, Q Loss: 1817376.859375, Actor Loss: -72429.88659667969
Episode 6630: Time: 0.27309346199035645, Total Reward: 220.013387544086, Q Loss: 1272681.244140625, Actor Loss: -60057.286865234375
Episode 6631: Time: 0.12008857727050781, Total Reward: 90.9451538767042, Q Loss: 451968.71875, Actor Loss: -26516.1875
Episode 6632: Time: 0.1638936996459961, Total Reward: 128.46037127794617, Q Loss: 790271.23046875, Actor Loss: -34586.597412109375
Episode 6633: Time: 0.3593025207519531, Total Reward: 295.22846243950386, Q Loss: 1823792.806640625, Actor Loss: -78124.38305664062
Episode 6634: Time: 0.20705032348632812, Total Reward: 165.55735331869099, Q Loss: 958918.5830078125, Actor Loss: -42977.10498046875
Episode 6635: Time: 0.6623077392578125, Total Reward: 556.0390501036857, Q Loss: 2855117.7607421875, Actor Loss: -141385.34008789062
Episode 6636: Time: 0.16287779808044434, Total Reward: 127.36103574969474, Q Loss: 779573.779296875, Actor Loss: -34596.6796875
Episode 6637: Time: 0.38081955909729004, Total Reward: 313.83081744157687, Q Loss: 2118823.275390625, Actor Loss: -80467.25891113281
Episode 6638: Time: 0.19620180130004883, Total Reward: 156.6118942120065, Q Loss: 860123.130859375, Actor Loss: -41576.159912109375
Episode 6639: Time: 0.2720756530761719, Total Reward: 221.35006139231686, Q Loss: 1657799.064453125, Actor Loss: -58060.21350097656
Episode 6640: Time: 0.3157308101654053, Total Reward: 258.2671228000039, Q Loss: 1424596.46484375, Actor Loss: -69314.7412109375
Episode 6641: Time: 0.3048372268676758, Total Reward: 247.6967925413458, Q Loss: 1197886.333984375, Actor Loss: -66016.8271484375
Episode 6642: Time: 0.15221500396728516, Total Reward: 118.84153290985664, Q Loss: 705605.21875, Actor Loss: -34138.654052734375
Episode 6643: Time: 0.08755326271057129, Total Reward: 63.43822507442794, Q Loss: 290383.7333984375, Actor Loss: -19485.052734375
Episode 6644: Time: 0.3910484313964844, Total Reward: 323.6483871830845, Q Loss: 1530345.591796875, Actor Loss: -83952.75634765625
Episode 6645: Time: 0.4233205318450928, Total Reward: 352.2824796778024, Q Loss: 1810783.337890625, Actor Loss: -91617.01684570312
Episode 6646: Time: 0.2293407917022705, Total Reward: 182.61878150446967, Q Loss: 1087895.8955078125, Actor Loss: -48635.06311035156
Episode 6647: Time: 0.16295146942138672, Total Reward: 129.0646794249752, Q Loss: 844717.865234375, Actor Loss: -35921.29052734375
Episode 6648: Time: 0.9543519020080566, Total Reward: 804.2868587065099, Q Loss: 4464083.75, Actor Loss: -207308.2010498047
Episode 6649: Time: 0.13047432899475098, Total Reward: 100.02188710643178, Q Loss: 413429.091796875, Actor Loss: -27679.285400390625
Episode 6650: Time: 0.4344298839569092, Total Reward: 360.8265967530096, Q Loss: 1927881.9169921875, Actor Loss: -94369.79968261719
Episode 6651: Time: 0.08713579177856445, Total Reward: 62.766686707628935, Q Loss: 416785.607421875, Actor Loss: -18138.318237304688
Episode 6652: Time: 0.39131975173950195, Total Reward: 323.76201069960877, Q Loss: 1390366.201171875, Actor Loss: -87216.79541015625
Episode 6653: Time: 0.86919426918802979, Total Reward: 732.5833022662492, Q Loss: 3751770.140625, Actor Loss: -187900.2587890625

Episode 6654: Time: 0.3801295757293701, Total Reward: 315.7930434639776, Q Loss: 1435748.482421875, Actor Loss: -85352.59033203125
Episode 6655: Time: 0.6514344215393066, Total Reward: 548.7051241265514, Q Loss: 2846559.279296875, Actor Loss: -140886.8056640625
Episode 6656: Time: 0.15227961540222168, Total Reward: 119.25693139917126, Q Loss: 943899.71484375, Actor Loss: -33119.46728515625
Episode 6657: Time: 0.5976028442382812, Total Reward: 500.8558572124998, Q Loss: 3199507.92578125, Actor Loss: -129483.75549316406
Episode 6658: Time: 0.18488359451293945, Total Reward: 147.44552131263004, Q Loss: 661996.35546875, Actor Loss: -39991.734130859375
Episode 6659: Time: 0.22873425483703613, Total Reward: 183.88911448414757, Q Loss: 1157137.599609375, Actor Loss: -48947.56042480469
Episode 6660: Time: 0.16302752494812012, Total Reward: 128.7302330105183, Q Loss: 751855.58984375, Actor Loss: -35628.23583984375
Episode 6661: Time: 0.3694620132446289, Total Reward: 304.29731401574384, Q Loss: 2113311.9453125, Actor Loss: -80432.31811523438
Episode 6662: Time: 0.2608206272125244, Total Reward: 212.45731963315205, Q Loss: 1230809.23828125, Actor Loss: -57539.61364746094
Episode 6663: Time: 0.1089327335357666, Total Reward: 81.82909310158884, Q Loss: 518742.880859375, Actor Loss: -23417.510498046875
Episode 6664: Time: 0.0871737003326416, Total Reward: 63.093814776244926, Q Loss: 366407.326171875, Actor Loss: -19644.693359375
Episode 6665: Time: 0.6074659824371338, Total Reward: 508.49631495002484, Q Loss: 2705412.56640625, Actor Loss: -134925.17346191406
Episode 6666: Time: 0.17391061782836914, Total Reward: 137.8743871181785, Q Loss: 943020.0, Actor Loss: -37105.89782714844
Episode 6667: Time: 0.31585168838500977, Total Reward: 256.9989097727579, Q Loss: 1384929.029296875, Actor Loss: -69156.21496582031
Episode 6668: Time: 0.14144468307495117, Total Reward: 110.01984240828628, Q Loss: 691704.978515625, Actor Loss: -31550.637329101562
Episode 6669: Time: 0.3588390350341797, Total Reward: 296.24293586549373, Q Loss: 1631100.48828125, Actor Loss: -77137.25793457031
Episode 6670: Time: 0.4566800594329834, Total Reward: 377.57044045414455, Q Loss: 2091016.8857421875, Actor Loss: -97838.23156738281
Episode 6671: Time: 0.09804701805114746, Total Reward: 72.38293514031027, Q Loss: 469039.951171875, Actor Loss: -20682.680419921875
Episode 6672: Time: 0.12009239196777344, Total Reward: 91.89956664073692, Q Loss: 535678.07421875, Actor Loss: -26247.382202148438
Episode 6673: Time: 0.5419304370880127, Total Reward: 453.1994673503543, Q Loss: 2594205.001953125, Actor Loss: -117460.27978515625
Episode 6674: Time: 0.3364558219909668, Total Reward: 275.88591212036835, Q Loss: 1450332.0400390625, Actor Loss: -74795.25317382812
Episode 6675: Time: 0.14132952690124512, Total Reward: 109.9537369523861, Q Loss: 668182.50390625, Actor Loss: -28917.102783203125
Episode 6676: Time: 0.4676401615142822, Total Reward: 388.55367982110164, Q Loss: 2038109.314453125, Actor Loss: -102610.97265625
Episode 6677: Time: 0.2612342834472656, Total Reward: 210.09134490356982, Q Loss: 1028737.419921875, Actor Loss: -56175.11877441406
Episode 6678: Time: 0.21727705001831055, Total Reward: 174.93356174942937, Q Loss: 997381.3857421875, Actor Loss: -47001.244384765625
Episode 6679: Time: 0.39093542098999023, Total Reward: 322.36492676836417, Q Loss: 1904544.84375, Actor Loss: -86696.296875
Episode 6680: Time: 0.14148378372192383, Total Reward: 109.51822215565969, Q Loss: 574129.05859375, Actor Loss: -30365.075561523438
Episode 6681: Time: 0.48862791061401367, Total Reward: 407.46750304842345, Q Loss: 2162469.732421875, Actor Loss: -109240.03430175781

Episode 6682: Time: 0.24999785423278809, Total Reward: 202.85149104086116, Q Loss: 1217510.509765625, Actor Loss: -54386.28674316406
Episode 6683: Time: 0.13041329383850098, Total Reward: 100.34641063181611, Q Loss: 879163.873046875, Actor Loss: -28753.113525390625
Episode 6684: Time: 0.1957089900970459, Total Reward: 156.35225813845503, Q Loss: 881048.494140625, Actor Loss: -43201.75085449219
Episode 6685: Time: 0.6506814956665039, Total Reward: 545.7513470379971, Q Loss: 3472485.234375, Actor Loss: -145032.89379882812
Episode 6686: Time: 0.5859272480010986, Total Reward: 491.462331964267, Q Loss: 2656073.3642578125, Actor Loss: -128302.4169921875
Episode 6687: Time: 0.8456563949584961, Total Reward: 713.7317396249763, Q Loss: 4219916.431640625, Actor Loss: -186091.29345703125
Episode 6688: Time: 0.14131522178649902, Total Reward: 109.64674193047388, Q Loss: 698212.4296875, Actor Loss: -28807.289916992188
Episode 6689: Time: 0.16338324546813965, Total Reward: 128.4552256081929, Q Loss: 689303.802734375, Actor Loss: -33456.62976074219
Episode 6690: Time: 0.13066983222961426, Total Reward: 100.23415657066708, Q Loss: 459308.3681640625, Actor Loss: -29280.963623046875
Episode 6691: Time: 0.16318321228027344, Total Reward: 128.47835152665624, Q Loss: 718556.88671875, Actor Loss: -36307.837890625
Episode 6692: Time: 0.24985289573669434, Total Reward: 203.00101420663609, Q Loss: 1087457.650390625, Actor Loss: -55636.949951171875
Episode 6693: Time: 0.18457651138305664, Total Reward: 147.5530079505179, Q Loss: 747363.8671875, Actor Loss: -40218.52783203125
Episode 6694: Time: 0.2174818515777588, Total Reward: 174.87112454796286, Q Loss: 895560.9365234375, Actor Loss: -48111.643798828125
Episode 6695: Time: 0.3148033618927002, Total Reward: 258.02318383865884, Q Loss: 1274414.279296875, Actor Loss: -70548.07348632812
Episode 6696: Time: 0.21719932556152344, Total Reward: 175.85394461766813, Q Loss: 914312.751953125, Actor Loss: -49151.9052734375
Episode 6697: Time: 0.19545698165893555, Total Reward: 155.36015199362367, Q Loss: 812774.595703125, Actor Loss: -42667.5498046875
Episode 6698: Time: 0.6727442741394043, Total Reward: 564.732240390447, Q Loss: 3052195.5478515625, Actor Loss: -145130.8046875
Episode 6699: Time: 0.34770917892456055, Total Reward: 286.3583188494726, Q Loss: 1786586.73828125, Actor Loss: -78255.794921875
Validation Mean: 9355.361950642517, Validation Std: 0.9238728417470728
saving model
Episode 6700: Time: 0.533642053604126, Total Reward: 444.5282693906344, Q Loss: 2564382.1640625, Actor Loss: -118992.01806640625
Episode 6701: Time: 0.17415761947631836, Total Reward: 137.47629956212603, Q Loss: 857070.7724609375, Actor Loss: -38476.81884765625
Episode 6702: Time: 0.09830212593078613, Total Reward: 72.47079587132392, Q Loss: 414107.716796875, Actor Loss: -21427.739624023438
Episode 6703: Time: 0.2501065731048584, Total Reward: 202.69183476055886, Q Loss: 1213687.095703125, Actor Loss: -55757.6220703125
Episode 6704: Time: 0.2719419002532959, Total Reward: 221.9188033481297, Q Loss: 1281579.884765625, Actor Loss: -60512.40576171875
Episode 6705: Time: 0.14159226417541504, Total Reward: 110.15244431682522, Q Loss: 601172.43359375, Actor Loss: -32591.618896484375
Episode 6706: Time: 0.34798693656921387, Total Reward: 286.1677844792579, Q Loss: 1815147.962890625, Actor Loss: -78019.41064453125
Episode 6707: Time: 0.5218765735626221, Total Reward: 435.67753542555005, Q Loss: 2428529.2763671875, Actor Loss: -117646.16735839844
Episode 6708: Time: 0.652332067489624, Total Reward: 548.954574938837, Q Loss: 3905406.3857421875, Actor Loss: -142470.9871826172

Episode 6709: Time: 0.4897787570953369, Total Reward: 408.2276352695967, Q Loss: 2622556.294921875, Actor Loss: -109564.31970214844
Episode 6710: Time: 0.2830066680908203, Total Reward: 228.44831356950442, Q Loss: 1743020.9033203125, Actor Loss: -61883.83264160156
Episode 6711: Time: 0.07656097412109375, Total Reward: 53.48848472062146, Q Loss: 320905.296875, Actor Loss: -16272.5302734375
Episode 6712: Time: 0.239396333694458, Total Reward: 192.46730456235628, Q Loss: 1124898.890625, Actor Loss: -53881.615966796875
Episode 6713: Time: 0.27243709564208984, Total Reward: 219.70306956613342, Q Loss: 1389367.953125, Actor Loss: -60550.73205566406
Episode 6714: Time: 0.4237186908721924, Total Reward: 352.5506079247187, Q Loss: 2170654.501953125, Actor Loss: -95371.37841796875
Episode 6715: Time: 0.2178206443786621, Total Reward: 173.71563309836012, Q Loss: 1178469.5107421875, Actor Loss: -50345.9833984375
Episode 6716: Time: 0.3040802478790283, Total Reward: 249.68299913750056, Q Loss: 1344150.25, Actor Loss: -66820.68212890625
Episode 6717: Time: 0.2506222724914551, Total Reward: 200.65637293540766, Q Loss: 1255880.619140625, Actor Loss: -55925.30517578125
Episode 6718: Time: 0.13057398796081543, Total Reward: 101.18890149297609, Q Loss: 479524.5556640625, Actor Loss: -29597.285400390625
Episode 6719: Time: 0.36900973320007324, Total Reward: 303.04678153968524, Q Loss: 1609285.8935546875, Actor Loss: -82852.5703125
Episode 6720: Time: 0.38035082817077637, Total Reward: 314.182239395226, Q Loss: 1719337.05078125, Actor Loss: -82800.54821777344
Episode 6721: Time: 0.15230131149291992, Total Reward: 119.07212597626774, Q Loss: 816671.423828125, Actor Loss: -33801.210205078125
Episode 6722: Time: 0.5435478687286377, Total Reward: 454.1488877566765, Q Loss: 2720104.05859375, Actor Loss: -121716.09875488281
Episode 6723: Time: 0.1853334903717041, Total Reward: 147.35782607880253, Q Loss: 837261.376953125, Actor Loss: -39977.278564453125
Episode 6724: Time: 0.3153998851776123, Total Reward: 258.1667409521381, Q Loss: 1413248.9765625, Actor Loss: -72570.55603027344
Episode 6725: Time: 0.30453062057495117, Total Reward: 248.0370826159761, Q Loss: 1557490.23828125, Actor Loss: -68661.69482421875
Episode 6726: Time: 0.33667588233947754, Total Reward: 278.05161182841977, Q Loss: 1483454.2275390625, Actor Loss: -75285.74865722656
Episode 6727: Time: 0.10887837409973145, Total Reward: 82.12385194546081, Q Loss: 627380.51953125, Actor Loss: -24781.435791015625
Episode 6728: Time: 0.2173309326171875, Total Reward: 175.26358885254797, Q Loss: 1575325.7734375, Actor Loss: -47603.32275390625
Episode 6729: Time: 0.673203706741333, Total Reward: 564.96430372573, Q Loss: 3975752.541015625, Actor Loss: -149409.5859375
Episode 6730: Time: 0.8027832508087158, Total Reward: 676.3264108589416, Q Loss: 4590240.958984375, Actor Loss: -183432.22705078125
Episode 6731: Time: 0.5755605697631836, Total Reward: 483.3183871745923, Q Loss: 3335945.2578125, Actor Loss: -130198.76208496094
Episode 6732: Time: 0.42469120025634766, Total Reward: 349.6206727004679, Q Loss: 2496933.373046875, Actor Loss: -95807.37329101562
Episode 6733: Time: 0.34888696670532227, Total Reward: 287.7912916701232, Q Loss: 1599863.29296875, Actor Loss: -77100.46557617188
Episode 6734: Time: 0.3372929096221924, Total Reward: 276.2147309125524, Q Loss: 1764461.97265625, Actor Loss: -78222.8955078125
Episode 6735: Time: 0.7481656074523926, Total Reward: 631.465225443857, Q Loss: 3453267.416015625, Actor Loss: -173109.53381347656
Episode 6736: Time: 0.43439435958862305, Total Reward: 361.2494861327459, Q Loss: 2049563.1494140625, Actor Loss: -98441.1787109375

Episode 6737: Time: 0.26162028312683105, Total Reward: 212.17540733582945, Q Loss: 1132797.4453125, Actor Loss: -60026.6953125
Episode 6738: Time: 0.14154529571533203, Total Reward: 110.30864692348972, Q Loss: 880366.53515625, Actor Loss: -31336.052978515625
Episode 6739: Time: 0.3366725444793701, Total Reward: 277.86259928587185, Q Loss: 2115653.9580078125, Actor Loss: -78290.17333984375
Episode 6740: Time: 0.39118242263793945, Total Reward: 323.61570188070704, Q Loss: 2147747.939453125, Actor Loss: -87618.25756835938
Episode 6741: Time: 0.6298279762268066, Total Reward: 527.1150784274356, Q Loss: 2975502.1259765625, Actor Loss: -143813.8211669922
Episode 6742: Time: 0.29305171966552734, Total Reward: 239.8967629871892, Q Loss: 1474042.951171875, Actor Loss: -65747.16271972656
Episode 6743: Time: 0.6082742214202881, Total Reward: 509.78353811067575, Q Loss: 3833408.40234375, Actor Loss: -139341.8291015625
Episode 6744: Time: 0.2608156204223633, Total Reward: 211.9538658882086, Q Loss: 1380649.341796875, Actor Loss: -59233.925537109375
Episode 6745: Time: 0.16291069984436035, Total Reward: 128.40043287975726, Q Loss: 958069.62890625, Actor Loss: -37562.116943359375
Episode 6746: Time: 0.4240901470184326, Total Reward: 351.39707374154244, Q Loss: 2233218.583984375, Actor Loss: -97247.69018554688
Episode 6747: Time: 0.3265230655670166, Total Reward: 267.7242438406737, Q Loss: 1705836.8466796875, Actor Loss: -72251.97497558594
Episode 6748: Time: 0.3698434829711914, Total Reward: 303.89593059755174, Q Loss: 1928428.607421875, Actor Loss: -85196.64624023438
Episode 6749: Time: 0.2500293254852295, Total Reward: 200.03675308466978, Q Loss: 1511936.5283203125, Actor Loss: -56925.372802734375
Episode 6750: Time: 0.6398777961730957, Total Reward: 537.3271613078955, Q Loss: 3617703.19140625, Actor Loss: -147085.00537109375
Episode 6751: Time: 0.19580888748168945, Total Reward: 156.49135822172892, Q Loss: 939466.7373046875, Actor Loss: -45479.110595703125
Episode 6752: Time: 0.3585810661315918, Total Reward: 292.9336065951923, Q Loss: 1879924.265625, Actor Loss: -81587.80712890625
Episode 6753: Time: 0.456035852432251, Total Reward: 377.1984634095046, Q Loss: 2233365.4775390625, Actor Loss: -108671.8046875
Episode 6754: Time: 0.3475935459136963, Total Reward: 285.7769017805971, Q Loss: 1782069.5234375, Actor Loss: -80335.8759765625
Episode 6755: Time: 0.08710074424743652, Total Reward: 63.04773982803299, Q Loss: 465508.623046875, Actor Loss: -19315.403076171875
Episode 6756: Time: 0.29328489303588867, Total Reward: 239.3642113800348, Q Loss: 1708775.9541015625, Actor Loss: -68962.22973632812
Episode 6757: Time: 0.3797190189361572, Total Reward: 314.5554235507159, Q Loss: 1920961.3408203125, Actor Loss: -88003.46533203125
Episode 6758: Time: 0.2504725456237793, Total Reward: 202.26257689109505, Q Loss: 1167836.658203125, Actor Loss: -56444.82971191406
Episode 6759: Time: 0.173966646194458, Total Reward: 137.4200620264368, Q Loss: 853872.71875, Actor Loss: -39156.68408203125
Episode 6760: Time: 0.07678985595703125, Total Reward: 53.2582033423638, Q Loss: 352082.32421875, Actor Loss: -17267.95458984375
Episode 6761: Time: 0.456040620803833, Total Reward: 379.83489736547324, Q Loss: 2794615.85546875, Actor Loss: -105536.03393554688
Episode 6762: Time: 0.3370020389556885, Total Reward: 277.8999894429208, Q Loss: 1880106.71484375, Actor Loss: -76555.78076171875
Episode 6763: Time: 0.1845841407775879, Total Reward: 145.25962746221742, Q Loss: 930305.880859375, Actor Loss: -43371.875732421875
Episode 6764: Time: 0.42360806465148926, Total Reward: 349.3060766562059, Q Loss: 1820182.83203125, Actor Loss: -96481.08166503906

Episode 6765: Time: 1.0095341205596924, Total Reward: 854.4204282904544, Q Loss: 4890032.8291015625, Actor Loss: -233588.59765625
Episode 6766: Time: 0.5861380100250244, Total Reward: 491.96707720931556, Q Loss: 3404982.1611328125, Actor Loss: -134885.7822265625
Episode 6767: Time: 0.39074254035949707, Total Reward: 324.2581723377054, Q Loss: 2146314.265625, Actor Loss: -90504.01000976562
Episode 6768: Time: 0.1089017391204834, Total Reward: 82.23257404903373, Q Loss: 499636.0693359375, Actor Loss: -25125.40234375
Episode 6769: Time: 0.4020199775695801, Total Reward: 332.4377365349412, Q Loss: 2028208.46484375, Actor Loss: -90045.43041992188
Episode 6770: Time: 0.43417978286743164, Total Reward: 360.22272897817714, Q Loss: 2645979.22265625, Actor Loss: -98112.63916015625
Episode 6771: Time: 0.6072521209716797, Total Reward: 509.0067847871974, Q Loss: 3146387.126953125, Actor Loss: -143252.29956054688
Episode 6772: Time: 0.10897159576416016, Total Reward: 81.99349179669015, Q Loss: 566957.486328125, Actor Loss: -24760.23828125
Episode 6773: Time: 0.879420280456543, Total Reward: 742.8126349711454, Q Loss: 4089406.2421875, Actor Loss: -202857.23010253906
Episode 6774: Time: 0.35915350914001465, Total Reward: 295.9133226968208, Q Loss: 1785030.87890625, Actor Loss: -81480.58386230469
Episode 6775: Time: 0.26110363006591797, Total Reward: 210.35306468523095, Q Loss: 1427333.876953125, Actor Loss: -60894.593994140625
Episode 6776: Time: 0.09829139709472656, Total Reward: 72.21233891720901, Q Loss: 795378.17578125, Actor Loss: -22979.112548828125
Episode 6777: Time: 0.4886648654937744, Total Reward: 407.7788590607094, Q Loss: 2845925.28515625, Actor Loss: -113289.74035644531
Episode 6778: Time: 0.40219569206237793, Total Reward: 333.8726324324807, Q Loss: 2346591.3203125, Actor Loss: -94844.03125
Episode 6779: Time: 0.4560849666595459, Total Reward: 379.81658579034706, Q Loss: 2721411.236328125, Actor Loss: -104198.67358398438
Episode 6780: Time: 0.30501747131347656, Total Reward: 248.38901133353377, Q Loss: 1528510.470703125, Actor Loss: -71898.9208984375
Episode 6781: Time: 0.23938417434692383, Total Reward: 190.9609373514756, Q Loss: 1449306.044921875, Actor Loss: -54489.06689453125
Episode 6782: Time: 0.47933173179626465, Total Reward: 398.3657875927272, Q Loss: 2262257.576171875, Actor Loss: -110812.55834960938
Episode 6783: Time: 0.29433465003967285, Total Reward: 239.06963171206618, Q Loss: 1827456.66796875, Actor Loss: -67857.52001953125
Episode 6784: Time: 0.43514108657836914, Total Reward: 360.43125009413774, Q Loss: 2255699.197265625, Actor Loss: -99808.12341308594
Episode 6785: Time: 0.35956811904907227, Total Reward: 294.97505786120524, Q Loss: 1867668.943359375, Actor Loss: -81827.0478515625
Episode 6786: Time: 0.3264443874359131, Total Reward: 267.117834723094, Q Loss: 1819781.7802734375, Actor Loss: -74800.13928222656
Episode 6787: Time: 0.18518853187561035, Total Reward: 147.22380360798067, Q Loss: 1047326.328125, Actor Loss: -43128.84619140625
Episode 6788: Time: 0.4136016368865967, Total Reward: 343.4841476683785, Q Loss: 2232022.853515625, Actor Loss: -95155.09228515625
Episode 6789: Time: 0.3590421676635742, Total Reward: 296.404101931504, Q Loss: 1957670.640625, Actor Loss: -86141.84887695312
Episode 6790: Time: 0.19647598266601562, Total Reward: 156.51783518416127, Q Loss: 985885.0341796875, Actor Loss: -43797.3271484375
Episode 6791: Time: 0.4460458755493164, Total Reward: 369.3636593387589, Q Loss: 2281574.134765625, Actor Loss: -103052.34228515625
Episode 6792: Time: 0.4774298667907715, Total Reward: 397.0458639011034, Q Loss: 2611381.1689453125, Actor Loss: -110442.1162109375

Episode 6793: Time: 0.7046303749084473, Total Reward: 595.3156362829275, Q Loss: 4514530.337890625, Actor Loss: -165019.458984375
Episode 6794: Time: 0.47909975051879883, Total Reward: 397.3175159166362, Q Loss: 2511613.294921875, Actor Loss: -114696.27734375
Episode 6795: Time: 0.19592070579528809, Total Reward: 156.67688131286707, Q Loss: 1125163.91796875, Actor Loss: -45507.351318359375
Episode 6796: Time: 0.6618618965148926, Total Reward: 555.8843821733126, Q Loss: 3913910.1552734375, Actor Loss: -154841.50805664062
Episode 6797: Time: 0.15240883827209473, Total Reward: 118.7693025985032, Q Loss: 869123.099609375, Actor Loss: -35323.487060546875
Episode 6798: Time: 0.10938549041748047, Total Reward: 82.30586118722113, Q Loss: 848964.294921875, Actor Loss: -24378.039306640625
Episode 6799: Time: 0.14132928848266602, Total Reward: 109.90799498272517, Q Loss: 803165.884765625, Actor Loss: -34542.0615234375
Validation Mean: 9355.067119527144, Validation Std: 0.5387765760858129
saving model
Episode 6800: Time: 0.2628912925720215, Total Reward: 212.2945043857923, Q Loss: 1280466.07421875, Actor Loss: -62888.666015625
Episode 6801: Time: 0.1523115634918213, Total Reward: 118.73521428296718, Q Loss: 1037569.228515625, Actor Loss: -35694.925048828125
Episode 6802: Time: 0.17447161674499512, Total Reward: 137.58920268059987, Q Loss: 1025934.896484375, Actor Loss: -40790.433349609375
Episode 6803: Time: 0.31525754928588867, Total Reward: 259.3748322555868, Q Loss: 1798947.26953125, Actor Loss: -73322.13000488281
Episode 6804: Time: 0.35831570625305176, Total Reward: 295.64947639000223, Q Loss: 1967160.021484375, Actor Loss: -85559.58642578125
Episode 6805: Time: 0.2717432975769043, Total Reward: 219.38386485351086, Q Loss: 1450186.3046875, Actor Loss: -64441.404296875
Episode 6806: Time: 0.1304931640625, Total Reward: 100.57093097827234, Q Loss: 629603.353515625, Actor Loss: -30834.04443359375
Episode 6807: Time: 0.2177422046661377, Total Reward: 174.99890378512833, Q Loss: 1268265.86328125, Actor Loss: -51319.279052734375
Episode 6808: Time: 0.4340662956237793, Total Reward: 359.50446743214906, Q Loss: 2230002.638671875, Actor Loss: -103435.61743164062
Episode 6809: Time: 0.250180721282959, Total Reward: 200.67192909640727, Q Loss: 1480604.8125, Actor Loss: -58369.1435546875
Episode 6810: Time: 0.30402398109436035, Total Reward: 249.90160308290334, Q Loss: 1503577.43359375, Actor Loss: -71843.74230957031
Episode 6811: Time: 0.2713632583618164, Total Reward: 221.5948276469156, Q Loss: 1400690.494140625, Actor Loss: -62886.57434082031
Episode 6812: Time: 0.34746766090393066, Total Reward: 284.57540054521525, Q Loss: 2321670.5498046875, Actor Loss: -82691.39526367188
Episode 6813: Time: 0.4992222785949707, Total Reward: 416.8492241407425, Q Loss: 2380397.916015625, Actor Loss: -115643.25561523438
Episode 6814: Time: 0.43378138542175293, Total Reward: 361.0654052071384, Q Loss: 2729464.001953125, Actor Loss: -102720.85412597656
Episode 6815: Time: 0.18449854850769043, Total Reward: 146.31849299303036, Q Loss: 994735.111328125, Actor Loss: -43646.513671875
Episode 6816: Time: 0.2286663055419922, Total Reward: 183.35843398746695, Q Loss: 1004302.388671875, Actor Loss: -54308.86279296875
Episode 6817: Time: 0.2499227523803711, Total Reward: 202.4461922226531, Q Loss: 1878865.3525390625, Actor Loss: -60238.769287109375
Episode 6818: Time: 0.20718812942504883, Total Reward: 165.13131330539656, Q Loss: 1228470.294921875, Actor Loss: -49461.505126953125
Episode 6819: Time: 0.4133870601654053, Total Reward: 342.2780418300413, Q Loss: 2686248.095703125, Actor Loss: -97217.98291015625

Episode 6820: Time: 0.22817087173461914, Total Reward: 184.50600652634552, Q Loss: 924125.66796875, Actor Loss: -54752.6162109375
Episode 6821: Time: 0.29357075691223145, Total Reward: 240.48943886407136, Q Loss: 1475554.638671875, Actor Loss: -69944.59814453125
Episode 6822: Time: 0.21738195419311523, Total Reward: 175.1704390165855, Q Loss: 1613457.134765625, Actor Loss: -54011.06982421875
Episode 6823: Time: 0.7166986465454102, Total Reward: 600.1345509547809, Q Loss: 4227246.681640625, Actor Loss: -168627.49731445312
Episode 6824: Time: 0.7060351371765137, Total Reward: 595.0000141658196, Q Loss: 3845195.83203125, Actor Loss: -169424.17309570312
Episode 6825: Time: 0.35814619064331055, Total Reward: 296.967135422943, Q Loss: 2293639.234375, Actor Loss: -86539.07983398438
Episode 6826: Time: 0.27157092094421387, Total Reward: 219.44300868995228, Q Loss: 1743854.75390625, Actor Loss: -65226.91943359375
Episode 6827: Time: 0.10889220237731934, Total Reward: 81.8433481019563, Q Loss: 515251.2705078125, Actor Loss: -26352.89697265625
Episode 6828: Time: 0.45629334449768066, Total Reward: 380.1929383534166, Q Loss: 2859040.94921875, Actor Loss: -108858.1298828125
Episode 6829: Time: 0.3473200798034668, Total Reward: 287.0588068899839, Q Loss: 1968499.068359375, Actor Loss: -83355.84106445312
Episode 6830: Time: 0.15231704711914062, Total Reward: 119.22127977582319, Q Loss: 920083.080078125, Actor Loss: -37697.548095703125
Episode 6831: Time: 0.09848833084106445, Total Reward: 71.03107845388358, Q Loss: 415151.404296875, Actor Loss: -22102.0302734375
Episode 6832: Time: 0.2506906986236572, Total Reward: 200.49996700779113, Q Loss: 1448740.43359375, Actor Loss: -58699.31005859375
Episode 6833: Time: 0.16330838203430176, Total Reward: 128.513488764193, Q Loss: 1115157.265625, Actor Loss: -40126.912841796875
Episode 6834: Time: 0.6409320831298828, Total Reward: 536.7825078933884, Q Loss: 3527538.787109375, Actor Loss: -152750.78540039062
Episode 6835: Time: 0.2827486991882324, Total Reward: 228.40900333042677, Q Loss: 1518155.548828125, Actor Loss: -67363.421875
Episode 6836: Time: 0.16307806968688965, Total Reward: 128.99824314923816, Q Loss: 1024653.599609375, Actor Loss: -38568.90295410156
Episode 6837: Time: 0.1526660919189453, Total Reward: 118.88487371372598, Q Loss: 1156621.0546875, Actor Loss: -37273.716064453125
Episode 6838: Time: 0.22835421562194824, Total Reward: 184.1069412717766, Q Loss: 1090543.8818359375, Actor Loss: -54178.126708984375
Episode 6839: Time: 0.14167141914367676, Total Reward: 110.05835936194838, Q Loss: 517978.7783203125, Actor Loss: -33287.93603515625
Episode 6840: Time: 0.20695161819458008, Total Reward: 164.13700172075247, Q Loss: 1104663.28515625, Actor Loss: -49162.840087890625
Episode 6841: Time: 0.3154032230377197, Total Reward: 258.60509035177495, Q Loss: 1572310.3828125, Actor Loss: -75055.67797851562
Episode 6842: Time: 0.5537359714508057, Total Reward: 463.9210478366453, Q Loss: 3297285.0712890625, Actor Loss: -130683.45861816406
Episode 6843: Time: 0.36998701095581055, Total Reward: 304.0524071964231, Q Loss: 2087013.7216796875, Actor Loss: -89214.30346679688
Episode 6844: Time: 0.31592607498168945, Total Reward: 257.22855394825297, Q Loss: 1589482.619140625, Actor Loss: -76995.37377929688
Episode 6845: Time: 0.17400574684143066, Total Reward: 138.16296109553085, Q Loss: 1016741.359375, Actor Loss: -41970.838134765625
Episode 6846: Time: 0.12021231651306152, Total Reward: 90.92689107871158, Q Loss: 689829.818359375, Actor Loss: -28182.53125
Episode 6847: Time: 0.23920965194702148, Total Reward: 194.05331146983394, Q Loss: 1327124.0390625, Actor Loss: -59419.82421875

Episode 6848: Time: 0.22870707511901855, Total Reward: 184.91297107193384, Q Loss: 1420835.787109375, Actor Loss: -54144.11669921875
Episode 6849: Time: 0.35895657539367676, Total Reward: 295.4477816835441, Q Loss: 2444504.029296875, Actor Loss: -88968.03735351562
Episode 6850: Time: 0.5005371570587158, Total Reward: 418.02563173237183, Q Loss: 2976648.751953125, Actor Loss: -121962.62231445312
Episode 6851: Time: 0.13116955757141113, Total Reward: 100.80884626932767, Q Loss: 638222.80078125, Actor Loss: -30959.1435546875
Episode 6852: Time: 0.27264928817749023, Total Reward: 220.001065652586, Q Loss: 1723883.40234375, Actor Loss: -63697.157958984375
Episode 6853: Time: 0.29407596588134766, Total Reward: 239.65595662969855, Q Loss: 1614088.638671875, Actor Loss: -70625.01171875
Episode 6854: Time: 0.33709716796875, Total Reward: 275.90580554991425, Q Loss: 1918212.1328125, Actor Loss: -82844.51904296875
Episode 6855: Time: 0.2288835048675537, Total Reward: 184.47031674185675, Q Loss: 1081996.4052734375, Actor Loss: -55399.703857421875
Episode 6856: Time: 0.43492817878723145, Total Reward: 359.104015572832, Q Loss: 2458065.9921875, Actor Loss: -104204.5322265625
Episode 6857: Time: 0.3160359859466553, Total Reward: 258.2065921607907, Q Loss: 1799461.50390625, Actor Loss: -75771.58374023438
Episode 6858: Time: 0.5770578384399414, Total Reward: 482.41980748498537, Q Loss: 3361683.6015625, Actor Loss: -137615.55322265625
Episode 6859: Time: 0.3484318256378174, Total Reward: 285.80405842484305, Q Loss: 2587047.87109375, Actor Loss: -84150.484375
Episode 6860: Time: 0.11984777450561523, Total Reward: 91.18539049939726, Q Loss: 925223.1552734375, Actor Loss: -29009.51025390625
Episode 6861: Time: 0.34897875785827637, Total Reward: 286.31186866372644, Q Loss: 2473353.451171875, Actor Loss: -86052.0166015625
Episode 6862: Time: 0.10904645919799805, Total Reward: 82.49243198646158, Q Loss: 712994.607421875, Actor Loss: -27229.2099609375
Episode 6863: Time: 0.5334489345550537, Total Reward: 441.7139131463349, Q Loss: 3527006.744140625, Actor Loss: -126025.396484375
Episode 6864: Time: 0.09813165664672852, Total Reward: 72.44035929804568, Q Loss: 536111.625, Actor Loss: -22689.058837890625
Episode 6865: Time: 0.14197468757629395, Total Reward: 110.37563176878564, Q Loss: 822179.833984375, Actor Loss: -34317.054931640625
Episode 6866: Time: 0.4449460506439209, Total Reward: 370.3228239833922, Q Loss: 2759216.11328125, Actor Loss: -106629.85791015625
Episode 6867: Time: 0.2609221935272217, Total Reward: 212.0594452600258, Q Loss: 1444631.50390625, Actor Loss: -62284.182373046875
Episode 6868: Time: 0.27248644828796387, Total Reward: 221.44857763928465, Q Loss: 1971462.38671875, Actor Loss: -66087.42529296875
Episode 6869: Time: 0.15262365341186523, Total Reward: 119.50865921844847, Q Loss: 1158818.9921875, Actor Loss: -37235.337890625
Episode 6870: Time: 0.43425440788269043, Total Reward: 361.5541607817764, Q Loss: 2953340.353515625, Actor Loss: -106775.81567382812
Episode 6871: Time: 0.16319918632507324, Total Reward: 129.24249590012286, Q Loss: 1093794.96484375, Actor Loss: -38505.614501953125
Episode 6872: Time: 0.43474435806274414, Total Reward: 360.89521508972985, Q Loss: 2673128.0546875, Actor Loss: -106430.16235351562
Episode 6873: Time: 0.3699955940246582, Total Reward: 304.3285215962224, Q Loss: 2100997.1796875, Actor Loss: -88369.00610351562
Episode 6874: Time: 0.6300206184387207, Total Reward: 529.9992976889406, Q Loss: 3679668.7548828125, Actor Loss: -154096.62817382812
Episode 6875: Time: 0.39161205291748047, Total Reward: 323.98590346866666, Q Loss: 2730457.181640625, Actor Loss: -96243.47094726562

Episode 6876: Time: 0.18510746955871582, Total Reward: 147.1228051080864, Q Loss: 1018813.115234375, Actor Loss: -45229.760009765625
Episode 6877: Time: 0.4140586853027344, Total Reward: 342.0380767650445, Q Loss: 2574339.828125, Actor Loss: -101030.05859375
Episode 6878: Time: 0.21805548667907715, Total Reward: 174.0623511213037, Q Loss: 1135488.849609375, Actor Loss: -53337.284423828125
Episode 6879: Time: 0.10896825790405273, Total Reward: 82.10674070708704, Q Loss: 627875.388671875, Actor Loss: -27352.7353515625
Episode 6880: Time: 0.15278172492980957, Total Reward: 119.04158063984521, Q Loss: 768741.583984375, Actor Loss: -36695.7568359375
Episode 6881: Time: 0.391521692276001, Total Reward: 324.0780485253501, Q Loss: 2246342.380859375, Actor Loss: -96699.5634765625
Episode 6882: Time: 0.16336464881896973, Total Reward: 127.6165526791539, Q Loss: 951013.5078125, Actor Loss: -39978.918701171875
Episode 6883: Time: 0.0766606330871582, Total Reward: 53.78934244737654, Q Loss: 452907.21484375, Actor Loss: -18803.980224609375
Episode 6884: Time: 0.09804677963256836, Total Reward: 72.36354546762199, Q Loss: 674534.466796875, Actor Loss: -24326.060791015625
Episode 6885: Time: 0.08730959892272949, Total Reward: 63.20997738070842, Q Loss: 776333.041015625, Actor Loss: -21483.219482421875
Episode 6886: Time: 0.21750593185424805, Total Reward: 175.86477940671614, Q Loss: 1149457.92578125, Actor Loss: -52191.35205078125
Episode 6887: Time: 0.4671034812927246, Total Reward: 388.24154836350937, Q Loss: 2503126.208984375, Actor Loss: -116421.66748046875
Episode 6888: Time: 0.1520376205444336, Total Reward: 119.17396238014032, Q Loss: 696208.3056640625, Actor Loss: -37243.86962890625
Episode 6889: Time: 0.4569559097290039, Total Reward: 379.1465736540093, Q Loss: 2191341.5859375, Actor Loss: -113735.32275390625
Episode 6890: Time: 0.10917401313781738, Total Reward: 81.82916847538371, Q Loss: 843312.484375, Actor Loss: -26407.306884765625
Episode 6891: Time: 0.28349828720092773, Total Reward: 229.1171097321194, Q Loss: 1835200.798828125, Actor Loss: -71423.38256835938
Episode 6892: Time: 0.22922420501708984, Total Reward: 182.021033303009915, Q Loss: 1586601.599609375, Actor Loss: -56824.337646484375
Episode 6893: Time: 0.4899911880493164, Total Reward: 406.4415373154242, Q Loss: 2962804.81640625, Actor Loss: -118570.79370117188
Episode 6894: Time: 0.27192115783691406, Total Reward: 221.33903430889598, Q Loss: 1832564.0703125, Actor Loss: -65161.29248046875
Episode 6895: Time: 0.7274792194366455, Total Reward: 610.2144493730442, Q Loss: 4415065.8408203125, Actor Loss: -177750.95532226562
Episode 6896: Time: 0.7603809833526611, Total Reward: 641.178283687425, Q Loss: 4435718.076171875, Actor Loss: -186859.28491210938
Episode 6897: Time: 0.16361689567565918, Total Reward: 129.03803334590913, Q Loss: 974779.587890625, Actor Loss: -41657.2392578125
Episode 6898: Time: 0.0767970085144043, Total Reward: 53.76507787356713, Q Loss: 524304.390625, Actor Loss: -19426.097412109375
Episode 6899: Time: 0.39166688919067383, Total Reward: 323.6519515164027, Q Loss: 2647050.30078125, Actor Loss: -96872.81616210938
Validation Mean: 9355.75563997809, Validation Std: 0.373477816478359
saving model
Episode 6900: Time: 0.31784701347351074, Total Reward: 257.0883427203275, Q Loss: 1897244.6201171875, Actor Loss: -77791.45629882812
Episode 6901: Time: 0.32677721977233887, Total Reward: 266.1907081325242, Q Loss: 1816988.11328125, Actor Loss: -79694.28979492188
Episode 6902: Time: 0.45725107192993164, Total Reward: 380.8442618373378, Q Loss: 2673970.044921875, Actor Loss: -114534.75024414062

Episode 6903: Time: 0.35950303077697754, Total Reward: 295.0514942770018, Q Loss: 2372003.998046875, Actor Loss: -89916.73168945312
Episode 6904: Time: 0.5218825340270996, Total Reward: 433.86614951220065, Q Loss: 3634900.2109375, Actor Loss: -128478.24389648438
Episode 6905: Time: 0.4352099895477295, Total Reward: 361.8967837101571, Q Loss: 2462759.779296875, Actor Loss: -106635.93188476562
Episode 6906: Time: 0.10900688171386719, Total Reward: 81.92584818062001, Q Loss: 713219.73828125, Actor Loss: -26264.769775390625
Episode 6907: Time: 0.631162166595459, Total Reward: 501.51554828435775, Q Loss: 4148470.6611328125, Actor Loss: -144470.10131835938
Episode 6908: Time: 0.2303605079650879, Total Reward: 184.26006377845053, Q Loss: 1218676.814453125, Actor Loss: -58398.777587890625
Episode 6909: Time: 0.3602721691131592, Total Reward: 295.62972391832733, Q Loss: 1724730.220703125, Actor Loss: -89177.267578125
Episode 6910: Time: 0.25148701667785645, Total Reward: 202.21593347514482, Q Loss: 1399098.79296875, Actor Loss: -62523.332763671875
Episode 6911: Time: 0.5665099620819092, Total Reward: 473.6950533442937, Q Loss: 3445562.578125, Actor Loss: -137340.87719726562
Episode 6912: Time: 0.3268120288848877, Total Reward: 267.829938811565, Q Loss: 1987930.404296875, Actor Loss: -79921.61572265625
Episode 6913: Time: 0.31630897521972656, Total Reward: 258.12363222946374, Q Loss: 1566813.486328125, Actor Loss: -78385.0068359375
Episode 6914: Time: 0.3271598815917969, Total Reward: 268.05015223341627, Q Loss: 2042698.5078125, Actor Loss: -81090.11328125
Episode 6915: Time: 0.1958911418914795, Total Reward: 156.18423726866763, Q Loss: 1662557.7265625, Actor Loss: -46655.4580078125
Episode 6916: Time: 0.48902249336242676, Total Reward: 407.79361251009016, Q Loss: 3232270.712890625, Actor Loss: -120920.08081054688
Episode 6917: Time: 0.435009241104126, Total Reward: 361.3249107412758, Q Loss: 3107345.9921875, Actor Loss: -108278.12866210938
Episode 6918: Time: 0.27248144149780273, Total Reward: 221.81339172950624, Q Loss: 1712428.4375, Actor Loss: -68561.84228515625
Episode 6919: Time: 0.13079071044921875, Total Reward: 100.41484692921905, Q Loss: 712750.0625, Actor Loss: -31793.546875
Episode 6920: Time: 0.2395484447479248, Total Reward: 193.4543388322929, Q Loss: 1366660.029296875, Actor Loss: -59384.582763671875
Episode 6921: Time: 0.5327260494232178, Total Reward: 445.1838243844622, Q Loss: 3449207.8349609375, Actor Loss: -131651.85327148438
Episode 6922: Time: 0.45644307136535645, Total Reward: 379.13766342941204, Q Loss: 2878451.916015625, Actor Loss: -112918.10668945312
Episode 6923: Time: 0.20773696899414062, Total Reward: 166.25440009245332, Q Loss: 1015139.984375, Actor Loss: -51789.47265625
Episode 6924: Time: 0.18510174751281738, Total Reward: 144.41606487190583, Q Loss: 1029317.140625, Actor Loss: -46551.549072265625
Episode 6925: Time: 0.4892401695251465, Total Reward: 406.03846004926334, Q Loss: 3060669.7724609375, Actor Loss: -120992.01672363281
Episode 6926: Time: 0.7496390342712402, Total Reward: 629.5084884793685, Q Loss: 3960155.3896484375, Actor Loss: -188898.87915039062
Episode 6927: Time: 0.4021570682525635, Total Reward: 333.9489847018872, Q Loss: 2573421.771484375, Actor Loss: -102485.2568359375
Episode 6928: Time: 0.9757983684539795, Total Reward: 826.8333186020024, Q Loss: 6405584.984375, Actor Loss: -242693.26416015625
Episode 6929: Time: 0.3052542209625244, Total Reward: 248.05509307161427, Q Loss: 2110071.96875, Actor Loss: -76436.26611328125
Episode 6930: Time: 0.1957073211669922, Total Reward: 155.68813649365785, Q Loss: 1384766.5810546875, Actor Loss: -48058.884521484375

Episode 6931: Time: 0.3370828628540039, Total Reward: 277.6021489699957, Q Loss: 2136877.66796875, Actor Loss: -84227.35107421875
Episode 6932: Time: 0.20695900917053223, Total Reward: 166.33789137334583, Q Loss: 1025024.515625, Actor Loss: -53245.785400390625
Episode 6933: Time: 0.2286062240600586, Total Reward: 181.70611039027034, Q Loss: 1564241.98828125, Actor Loss: -57186.65576171875
Episode 6934: Time: 0.4887838363647461, Total Reward: 406.9156868161427, Q Loss: 3082808.0107421875, Actor Loss: -121245.54296875
Episode 6935: Time: 0.2831075191497803, Total Reward: 230.50931849073686, Q Loss: 1529962.16015625, Actor Loss: -72291.50244140625
Episode 6936: Time: 0.10886049270629883, Total Reward: 81.9316041410053, Q Loss: 777847.83203125, Actor Loss: -27604.045166015625
Episode 6937: Time: 0.2177112102508545, Total Reward: 174.8852989865117, Q Loss: 1422184.3662109375, Actor Loss: -55891.95166015625
Episode 6938: Time: 0.31679344177246094, Total Reward: 259.03174503626263, Q Loss: 2217239.28515625, Actor Loss: -80298.57275390625
Episode 6939: Time: 0.5973494052886963, Total Reward: 500.64857048279157, Q Loss: 3649477.0234375, Actor Loss: -152178.10327148438
Episode 6940: Time: 0.0873415470123291, Total Reward: 63.41750506961556, Q Loss: 480783.27734375, Actor Loss: -23294.589599609375
Episode 6941: Time: 0.26103663444519043, Total Reward: 212.36182547871329, Q Loss: 1625717.7529296875, Actor Loss: -65470.14208984375
Episode 6942: Time: 0.15235495567321777, Total Reward: 119.40847257059218, Q Loss: 1003154.583984375, Actor Loss: -38664.2060546875
Episode 6943: Time: 0.2181994915008545, Total Reward: 174.40020189058205, Q Loss: 1639808.1796875, Actor Loss: -53238.89990234375
Episode 6944: Time: 0.28252720832824707, Total Reward: 228.97508508700537, Q Loss: 2080059.990234375, Actor Loss: -70703.89721679688
Episode 6945: Time: 0.44606637954711914, Total Reward: 370.61006131410824, Q Loss: 3360603.7060546875, Actor Loss: -115735.83203125
Episode 6946: Time: 0.16323447227478027, Total Reward: 128.6830039133217, Q Loss: 1403757.609375, Actor Loss: -40421.378173828125
Episode 6947: Time: 0.10964059829711914, Total Reward: 82.58301696750574, Q Loss: 475044.36328125, Actor Loss: -28252.838623046875
Episode 6948: Time: 0.15239310264587402, Total Reward: 118.57349350480047, Q Loss: 831256.64453125, Actor Loss: -38939.466552734375
Episode 6949: Time: 0.47836756706237793, Total Reward: 398.1492260183114, Q Loss: 3674890.2265625, Actor Loss: -121714.23559570312
Episode 6950: Time: 0.4784657955169678, Total Reward: 398.0203233081875, Q Loss: 2998596.958984375, Actor Loss: -122498.25268554688
Episode 6951: Time: 0.6393706798553467, Total Reward: 527.4898749582228, Q Loss: 3966359.392578125, Actor Loss: -158338.44213867188
Episode 6952: Time: 0.18524646759033203, Total Reward: 147.79809386862283, Q Loss: 1050835.615234375, Actor Loss: -46474.340087890625
Episode 6953: Time: 0.0660712718963623, Total Reward: 44.47177589520715, Q Loss: 541322.01171875, Actor Loss: -16489.818115234375
Episode 6954: Time: 0.7921490669250488, Total Reward: 667.7027936599625, Q Loss: 5269609.18359375, Actor Loss: -203777.42944335938
Episode 6955: Time: 0.09801650047302246, Total Reward: 73.02333977033351, Q Loss: 800772.12890625, Actor Loss: -24911.875244140625
Episode 6956: Time: 0.26120519638061523, Total Reward: 212.3573070130339, Q Loss: 1725670.3515625, Actor Loss: -66208.08081054688
Episode 6957: Time: 0.38046789169311523, Total Reward: 312.5037230350498, Q Loss: 2943783.9765625, Actor Loss: -100142.7578125
Episode 6958: Time: 0.5439193248748779, Total Reward: 454.2467815503244, Q Loss: 3768542.291015625, Actor Loss: -136431.31811523438

Episode 6959: Time: 0.1739957332611084, Total Reward: 138.1533100473295, Q Loss: 1163317.943359375, Actor Loss: -43923.545654296875
Episode 6960: Time: 0.3590538501739502, Total Reward: 295.03951459057157, Q Loss: 2272566.52734375, Actor Loss: -88762.53784179688
Episode 6961: Time: 0.5423898696899414, Total Reward: 453.5156882554018, Q Loss: 4216561.970703125, Actor Loss: -137292.6182861328
Episode 6962: Time: 0.38038182258605957, Total Reward: 313.9979123350399, Q Loss: 2458016.96484375, Actor Loss: -97963.56665039062
Episode 6963: Time: 0.2609848976135254, Total Reward: 212.41402815308427, Q Loss: 1770115.9375, Actor Loss: -65955.3369140625
Episode 6964: Time: 0.25025200843811035, Total Reward: 203.25691893797273, Q Loss: 1597341.603515625, Actor Loss: -61674.78125
Episode 6965: Time: 0.173783540725708, Total Reward: 137.3485948572549, Q Loss: 1010960.177734375, Actor Loss: -44731.873779296875
Episode 6966: Time: 0.2718987464904785, Total Reward: 220.21650112239115, Q Loss: 1554470.671875, Actor Loss: -71268.93139648438
Episode 6967: Time: 0.3586862087249756, Total Reward: 296.0252311044606, Q Loss: 2661319.201171875, Actor Loss: -91364.81567382812
Episode 6968: Time: 0.1849212646484375, Total Reward: 144.96766178120325, Q Loss: 1389478.830078125, Actor Loss: -48906.23583984375
Episode 6969: Time: 0.304149866104126, Total Reward: 248.1828508246067, Q Loss: 1713835.119140625, Actor Loss: -79531.07788085938
Episode 6970: Time: 0.1738877296447754, Total Reward: 137.38674368115502, Q Loss: 927110.2763671875, Actor Loss: -43622.878173828125
Episode 6971: Time: 0.271756649017334, Total Reward: 220.21062834502428, Q Loss: 1841447.779296875, Actor Loss: -68053.92797851562
Episode 6972: Time: 0.4780292510986328, Total Reward: 397.7044126747007, Q Loss: 3391005.0, Actor Loss: -122191.31408691406
Episode 6973: Time: 0.260845422744751, Total Reward: 210.91220648897288, Q Loss: 1440269.8359375, Actor Loss: -64900.77893066406
Episode 6974: Time: 0.4678771495819092, Total Reward: 389.76235970612703, Q Loss: 3077996.86328125, Actor Loss: -123139.73388671875
Episode 6975: Time: 0.31502580642700195, Total Reward: 256.8424424877245, Q Loss: 1802641.2265625, Actor Loss: -80040.26440429688
Episode 6976: Time: 0.3042936325073242, Total Reward: 250.36307878514208, Q Loss: 2002129.880859375, Actor Loss: -80530.48608398438
Episode 6977: Time: 0.36928367614746094, Total Reward: 305.4075881080769, Q Loss: 2528378.140625, Actor Loss: -94502.05004882812
Episode 6978: Time: 0.4781770706176758, Total Reward: 397.6340774376803, Q Loss: 2684663.0908203125, Actor Loss: -122512.79565429688
Episode 6979: Time: 0.2392864227294922, Total Reward: 191.31467928888608, Q Loss: 1500606.23828125, Actor Loss: -60746.393798828125
Episode 6980: Time: 0.1957249641418457, Total Reward: 156.7340993723742, Q Loss: 1353994.978515625, Actor Loss: -48169.933349609375
Episode 6981: Time: 0.21796607971191406, Total Reward: 175.210930778381, Q Loss: 1345540.203125, Actor Loss: -56007.213623046875
Episode 6982: Time: 0.23994040489196777, Total Reward: 193.24819808166203, Q Loss: 1518198.8046875, Actor Loss: -60534.19140625
Episode 6983: Time: 0.08733510971069336, Total Reward: 62.86266903659695, Q Loss: 518572.71484375, Actor Loss: -22776.061767578125
Episode 6984: Time: 0.4454362392425537, Total Reward: 369.4779537019456, Q Loss: 3499530.353515625, Actor Loss: -116235.0185546875
Episode 6985: Time: 0.22860407829284668, Total Reward: 181.90874665772662, Q Loss: 1867214.09375, Actor Loss: -59404.623779296875
Episode 6986: Time: 0.18460893630981445, Total Reward: 145.75333618004203, Q Loss: 1239694.08203125, Actor Loss: -47530.343994140625

Episode 6987: Time: 0.1202094554901123, Total Reward: 91.48922978769518, Q Loss: 793679.0625, Actor Loss: -30672.137939453125
Episode 6988: Time: 0.21722698211669922, Total Reward: 175.13323607109743, Q Loss: 1732745.515625, Actor Loss: -54153.188720703125
Episode 6989: Time: 0.1304457187652588, Total Reward: 100.30731519867217, Q Loss: 799282.919921875, Actor Loss: -33486.97900390625
Episode 6990: Time: 0.15246796607971191, Total Reward: 119.35760207495912, Q Loss: 846260.22265625, Actor Loss: -38618.72216796875
Episode 6991: Time: 0.2823312282562256, Total Reward: 230.8993987963863, Q Loss: 2315511.416015625, Actor Loss: -75278.6533203125
Episode 6992: Time: 0.3915128707885742, Total Reward: 324.57098782282014, Q Loss: 2785832.7265625, Actor Loss: -102174.38037109375
Episode 6993: Time: 0.33704113960266113, Total Reward: 276.483966888963, Q Loss: 2575320.140625, Actor Loss: -87457.76733398438
Episode 6994: Time: 0.5210158824920654, Total Reward: 436.461330206204, Q Loss: 4134497.91015625, Actor Loss: -134286.01782226562
Episode 6995: Time: 0.4018886089324951, Total Reward: 333.32740392293954, Q Loss: 2780353.736328125, Actor Loss: -104300.17431640625
Episode 6996: Time: 0.5757527351379395, Total Reward: 481.3898172457032, Q Loss: 3504744.119140625, Actor Loss: -148187.45190429688
Episode 6997: Time: 0.3804490566253662, Total Reward: 313.67110818809203, Q Loss: 2202596.755859375, Actor Loss: -97805.666015625
Episode 6998: Time: 0.3476998805999756, Total Reward: 284.60025807010226, Q Loss: 3075509.931640625, Actor Loss: -89768.91162109375
Episode 6999: Time: 0.8577373027801514, Total Reward: 724.9440524538898, Q Loss: 5594796.9140625, Actor Loss: -226276.51489257812
Validation Mean: 9355.172315505037, Validation Std: 0.43291001094917364
saving model
Episode 7000: Time: 0.46878480911254883, Total Reward: 387.4289926614396, Q Loss: 2879916.37890625, Actor Loss: -121555.45190429688
Episode 7001: Time: 0.434112548828125, Total Reward: 361.57653117027115, Q Loss: 2599556.365234375, Actor Loss: -114419.87475585938
Episode 7002: Time: 0.07633161544799805, Total Reward: 53.873427799905485, Q Loss: 605240.935546875, Actor Loss: -19001.61474609375
Episode 7003: Time: 0.34780097007751465, Total Reward: 286.77148120991, Q Loss: 2456922.240234375, Actor Loss: -90169.943359375
Episode 7004: Time: 0.18451189994812012, Total Reward: 146.65570395307887, Q Loss: 1207075.755859375, Actor Loss: -48640.215576171875
Episode 7005: Time: 0.33658623695373535, Total Reward: 277.8465267910621, Q Loss: 2206433.2509765625, Actor Loss: -85829.97607421875
Episode 7006: Time: 0.29327917098999023, Total Reward: 239.53798276373072, Q Loss: 1743018.66796875, Actor Loss: -78467.94555664062
Episode 7007: Time: 0.38127970695495605, Total Reward: 314.7968830180399, Q Loss: 2332681.853515625, Actor Loss: -101832.84057617188
Episode 7008: Time: 0.45638227462768555, Total Reward: 376.7414757885548, Q Loss: 2965806.1484375, Actor Loss: -120060.576171875
Episode 7009: Time: 0.1305687427520752, Total Reward: 100.5535024176701, Q Loss: 819126.80859375, Actor Loss: -34496.628662109375
Episode 7010: Time: 0.18509578704833984, Total Reward: 147.335014475855, Q Loss: 990043.890625, Actor Loss: -48356.355712890625
Episode 7011: Time: 0.3584628105163574, Total Reward: 294.46298345396536, Q Loss: 2696314.88671875, Actor Loss: -92686.3056640625
Episode 7012: Time: 0.5212986469268799, Total Reward: 434.5447303944954, Q Loss: 3368833.275390625, Actor Loss: -136182.607421875
Episode 7013: Time: 0.10886812210083008, Total Reward: 82.01004548185759, Q Loss: 846462.232421875, Actor Loss: -27578.81689453125

Episode 7014: Time: 0.3807494640350342, Total Reward: 313.70113601299977, Q Loss: 2418546.75, Actor Loss: -96445.68090820312
Episode 7015: Time: 0.27169156074523926, Total Reward: 220.72005066370335, Q Loss: 1908854.4609375, Actor Loss: -70256.84814453125
Episode 7016: Time: 0.2612013816833496, Total Reward: 212.74800602767604, Q Loss: 1390127.8388671875, Actor Loss: -66556.55712890625
Episode 7017: Time: 0.19556736946105957, Total Reward: 156.50414680402548, Q Loss: 1452031.2578125, Actor Loss: -51237.755615234375
Episode 7018: Time: 0.3150975704193115, Total Reward: 258.16797162109714, Q Loss: 2080873.625, Actor Loss: -80643.38159179688
Episode 7019: Time: 0.5540308952331543, Total Reward: 462.72901378871234, Q Loss: 4498517.6953125, Actor Loss: -143565.44750976562
Episode 7020: Time: 0.4456465244293213, Total Reward: 370.4692283188038, Q Loss: 2698359.87109375, Actor Loss: -116430.67944335938
Episode 7021: Time: 0.46703362464904785, Total Reward: 389.15746609899685, Q Loss: 3921592.9765625, Actor Loss: -123099.22680664062
Episode 7022: Time: 0.1960315704345703, Total Reward: 156.33183109020092, Q Loss: 974018.326171875, Actor Loss: -53937.3984375
Episode 7023: Time: 0.3369288444519043, Total Reward: 277.13906822400736, Q Loss: 2171107.51171875, Actor Loss: -91053.1484375
Episode 7024: Time: 0.32605457305908203, Total Reward: 268.66871447029405, Q Loss: 2419717.8359375, Actor Loss: -84943.66845703125
Episode 7025: Time: 0.11995959281921387, Total Reward: 91.24857463818432, Q Loss: 803641.28125, Actor Loss: -31243.551513671875
Episode 7026: Time: 0.29413366317749023, Total Reward: 240.04272304330317, Q Loss: 2194160.970703125, Actor Loss: -74589.3974609375
Episode 7027: Time: 0.6082718372344971, Total Reward: 509.18423411996184, Q Loss: 4030334.5390625, Actor Loss: -160425.380859375
Episode 7028: Time: 0.28299641609191895, Total Reward: 228.90557854699728, Q Loss: 1649967.0859375, Actor Loss: -73558.46142578125
Episode 7029: Time: 0.0979163646697998, Total Reward: 72.63032590569519, Q Loss: 813593.94140625, Actor Loss: -24664.274658203125
Episode 7030: Time: 0.2725343704223633, Total Reward: 221.08425771951565, Q Loss: 1725373.654296875, Actor Loss: -72730.97875976562
Episode 7031: Time: 0.5319101810455322, Total Reward: 444.13477513932423, Q Loss: 4200062.37109375, Actor Loss: -141236.1416015625
Episode 7032: Time: 0.40247440338134766, Total Reward: 331.9636045653719, Q Loss: 3232001.15234375, Actor Loss: -106967.23022460938
Episode 7033: Time: 0.48819947242736816, Total Reward: 407.3785891659881, Q Loss: 3394208.533203125, Actor Loss: -127765.87426757812
Episode 7034: Time: 0.17390894889831543, Total Reward: 137.77829074108234, Q Loss: 1194686.8203125, Actor Loss: -45720.8349609375
Episode 7035: Time: 0.434751033782959, Total Reward: 361.8283027762893, Q Loss: 2931594.580078125, Actor Loss: -116230.47924804688
Episode 7036: Time: 0.4453425407409668, Total Reward: 370.58184137012773, Q Loss: 2974620.71484375, Actor Loss: -118296.33984375
Episode 7037: Time: 0.3590834140777588, Total Reward: 295.35529836958455, Q Loss: 2451232.544921875, Actor Loss: -94214.40234375
Episode 7038: Time: 0.3267841339111328, Total Reward: 268.053054817554, Q Loss: 2051607.884765625, Actor Loss: -85924.40795898438
Episode 7039: Time: 0.21739912033081055, Total Reward: 173.15873907748548, Q Loss: 1336232.357421875, Actor Loss: -58563.4736328125
Episode 7040: Time: 0.3048379421234131, Total Reward: 247.20622156957666, Q Loss: 2407087.0146484375, Actor Loss: -83196.94067382812
Episode 7041: Time: 0.37004590034484863, Total Reward: 302.6422666763679, Q Loss: 2391762.93359375, Actor Loss: -98732.75854492188

Episode 7042: Time: 0.2072288990020752, Total Reward: 165.05456214750888, Q Loss: 1594711.380859375, Actor Loss: -53791.499755859375
Episode 7043: Time: 0.1742408275604248, Total Reward: 137.66973530331154, Q Loss: 1205552.185546875, Actor Loss: -46229.095947265625
Episode 7044: Time: 0.2830052375793457, Total Reward: 228.58581179196256, Q Loss: 1757941.283203125, Actor Loss: -74903.7998046875
Episode 7045: Time: 0.3698875904083252, Total Reward: 304.06123439750866, Q Loss: 2570093.63671875, Actor Loss: -99142.52270507812
Episode 7046: Time: 0.29393577575683594, Total Reward: 240.9525885749639, Q Loss: 1937996.3359375, Actor Loss: -78425.4423828125
Episode 7047: Time: 0.14153766632080078, Total Reward: 109.46241512925369, Q Loss: 1314335.67578125, Actor Loss: -37744.4912109375
Episode 7048: Time: 0.17450761795043945, Total Reward: 137.66563431907363, Q Loss: 1184550.234375, Actor Loss: -47758.0341796875
Episode 7049: Time: 0.5865719318389893, Total Reward: 489.0296223734493, Q Loss: 4437354.91796875, Actor Loss: -157369.77197265625
Episode 7050: Time: 0.6838359832763672, Total Reward: 575.869763444969, Q Loss: 5183428.59375, Actor Loss: -185035.93237304688
Episode 7051: Time: 0.34821391105651855, Total Reward: 285.9120744399398, Q Loss: 2502143.94921875, Actor Loss: -92993.88403320312
Episode 7052: Time: 0.5640978813171387, Total Reward: 473.8512259482969, Q Loss: 4291376.794921875, Actor Loss: -151769.22412109375
Episode 7053: Time: 0.2713654041290283, Total Reward: 221.9769943749184, Q Loss: 1535464.0546875, Actor Loss: -75391.47045898438
Episode 7054: Time: 0.23924922943115234, Total Reward: 191.8962472177294, Q Loss: 1481847.580078125, Actor Loss: -63843.396728515625
Episode 7055: Time: 0.19582796096801758, Total Reward: 156.26175383916143, Q Loss: 1572109.80859375, Actor Loss: -52329.19091796875
Episode 7056: Time: 0.18560528755187988, Total Reward: 146.41418959133134, Q Loss: 1005342.3203125, Actor Loss: -48410.269287109375
Episode 7057: Time: 0.24986839294433594, Total Reward: 199.62120276965382, Q Loss: 1965319.845703125, Actor Loss: -66506.8505859375
Episode 7058: Time: 0.3913865089416504, Total Reward: 322.50612229095236, Q Loss: 2814108.0234375, Actor Loss: -102306.26098632812
Episode 7059: Time: 0.49986743927001953, Total Reward: 417.8688246582136, Q Loss: 3785455.57421875, Actor Loss: -135233.998046875
Episode 7060: Time: 0.30469465255737305, Total Reward: 248.55843982174585, Q Loss: 2162481.64453125, Actor Loss: -80512.40063476562
Episode 7061: Time: 0.39160966873168945, Total Reward: 323.92918427669764, Q Loss: 3356557.6171875, Actor Loss: -101680.02075195312
Episode 7062: Time: 0.33764052391052246, Total Reward: 276.59696357856734, Q Loss: 2262081.486328125, Actor Loss: -90570.37060546875
Episode 7063: Time: 0.32653141021728516, Total Reward: 267.80677756754295, Q Loss: 2636713.21875, Actor Loss: -85493.1923828125
Episode 7064: Time: 0.20713043212890625, Total Reward: 165.45662525570881, Q Loss: 1393271.345703125, Actor Loss: -54577.363525390625
Episode 7065: Time: 0.21787285804748535, Total Reward: 175.11897357470585, Q Loss: 1691545.0, Actor Loss: -59331.91845703125
Episode 7066: Time: 0.40192389488220215, Total Reward: 330.9785271224879, Q Loss: 2639918.828125, Actor Loss: -108575.26586914062
Episode 7067: Time: 0.23975324630737305, Total Reward: 193.37650239924983, Q Loss: 1607351.109375, Actor Loss: -66503.21557617188
Episode 7068: Time: 0.2503821849822998, Total Reward: 203.67119855177913, Q Loss: 1799549.853515625, Actor Loss: -69386.32299804688
Episode 7069: Time: 0.5650100708007812, Total Reward: 472.93505153316478, Q Loss: 4223004.78125, Actor Loss: -151003.44653320312

Episode 7070: Time: 0.21770572662353516, Total Reward: 174.5840024900648, Q Loss: 2002134.86328125, Actor Loss: -58505.27587890625
Episode 7071: Time: 0.5337646007537842, Total Reward: 443.459417995292, Q Loss: 3568243.23828125, Actor Loss: -141146.25610351562
Episode 7072: Time: 0.37028002738952637, Total Reward: 305.4780432351412, Q Loss: 2636877.935546875, Actor Loss: -100771.25659179688
Episode 7073: Time: 0.4134228229522705, Total Reward: 341.5432594126461, Q Loss: 3029481.421875, Actor Loss: -110488.1708984375
Episode 7074: Time: 1.0322043895721436, Total Reward: 871.5694749984002, Q Loss: 7955021.07421875, Actor Loss: -280891.8947753906
Episode 7075: Time: 0.20716428756713867, Total Reward: 166.05373041609167, Q Loss: 1750340.427734375, Actor Loss: -55452.314208984375
Episode 7076: Time: 0.10905647277832031, Total Reward: 81.48215383440397, Q Loss: 845837.546875, Actor Loss: -29583.6552734375
Episode 7077: Time: 0.272258996963501, Total Reward: 222.60547606838523, Q Loss: 1902765.82421875, Actor Loss: -72978.58520507812
Episode 7078: Time: 0.13059711456298828, Total Reward: 101.07019541235083, Q Loss: 1001607.689453125, Actor Loss: -34887.558837890625
Episode 7079: Time: 0.08775019645690918, Total Reward: 62.65022880859254, Q Loss: 629547.03125, Actor Loss: -21632.99755859375
Episode 7080: Time: 0.294403076171875, Total Reward: 239.54318030998692, Q Loss: 2194668.126953125, Actor Loss: -77843.19091796875
Episode 7081: Time: 0.23982858657836914, Total Reward: 193.7455266412876, Q Loss: 1515884.251953125, Actor Loss: -64549.599609375
Episode 7082: Time: 0.2844889163970947, Total Reward: 230.27509093665523, Q Loss: 1997902.892578125, Actor Loss: -74951.76928710938
Episode 7083: Time: 0.22930121421813965, Total Reward: 184.10800375743682, Q Loss: 1765230.0234375, Actor Loss: -62136.255615234375
Episode 7084: Time: 0.34881043434143066, Total Reward: 286.3092676043736, Q Loss: 2419607.197265625, Actor Loss: -92513.52368164062
Episode 7085: Time: 0.26160192489624023, Total Reward: 212.00171610932202, Q Loss: 1710350.095703125, Actor Loss: -70516.501953125
Episode 7086: Time: 0.3815298080444336, Total Reward: 314.7471452551798, Q Loss: 3298689.189453125, Actor Loss: -104104.56298828125
Episode 7087: Time: 0.32712864875793457, Total Reward: 268.13008345386044, Q Loss: 2610441.435546875, Actor Loss: -92692.98315429688
Episode 7088: Time: 0.26203036308288574, Total Reward: 212.12731025720424, Q Loss: 1556188.458984375, Actor Loss: -70727.95532226562
Episode 7089: Time: 0.17435193061828613, Total Reward: 137.7151106503039, Q Loss: 1267353.724609375, Actor Loss: -48827.517333984375
Episode 7090: Time: 0.20740246772766113, Total Reward: 165.8900435072769, Q Loss: 1530451.76953125, Actor Loss: -57319.09423828125
Episode 7091: Time: 0.6308739185333252, Total Reward: 528.450026521827, Q Loss: 4550329.7421875, Actor Loss: -173822.11474609375
Episode 7092: Time: 0.30460143089294434, Total Reward: 249.9321785200133, Q Loss: 2460915.7890625, Actor Loss: -83068.18603515625
Episode 7093: Time: 0.1524336338043213, Total Reward: 118.63182625616017, Q Loss: 873036.5234375, Actor Loss: -40032.01611328125
Episode 7094: Time: 0.987372636795044, Total Reward: 833.3568626064375, Q Loss: 7099783.591796875, Actor Loss: -267495.87890625
Episode 7095: Time: 0.3369622230529785, Total Reward: 278.12406259890776, Q Loss: 2533515.0859375, Actor Loss: -92731.08447265625
Episode 7096: Time: 0.41273021697998047, Total Reward: 342.7635088705603, Q Loss: 2646143.630859375, Actor Loss: -110361.5986328125
Episode 7097: Time: 0.2732362747192383, Total Reward: 221.66750285556304, Q Loss: 2146247.943359375, Actor Loss: -73583.04638671875

Episode 7098: Time: 0.40288257598876953, Total Reward: 332.74897244403707, Q Loss: 3662726.265625, Actor Loss: -110293.21459960938
Episode 7099: Time: 0.39182376861572266, Total Reward: 323.02548924034085, Q Loss: 2737683.58984375, Actor Loss: -107598.19946289062
Validation Mean: 9355.110590103075, Validation Std: 0.4416315066679033
saving model
Episode 7100: Time: 0.18645834922790527, Total Reward: 147.4715289638417, Q Loss: 1791235.171875, Actor Loss: -51450.440673828125
Episode 7101: Time: 0.14214444160461426, Total Reward: 108.80347556267971, Q Loss: 927990.859375, Actor Loss: -39825.19873046875
Episode 7102: Time: 0.4144608974456787, Total Reward: 342.3926502143892, Q Loss: 3987486.30078125, Actor Loss: -107986.96850585938
Episode 7103: Time: 0.2940666675567627, Total Reward: 240.1225162791015, Q Loss: 2195936.765625, Actor Loss: -79282.35205078125
Episode 7104: Time: 0.803577184677124, Total Reward: 678.7422128199892, Q Loss: 5910809.4716796875, Actor Loss: -222405.52783203125
Episode 7105: Time: 0.7166502475738525, Total Reward: 603.6336274837251, Q Loss: 5462193.353515625, Actor Loss: -192842.34326171875
Episode 7106: Time: 0.05469202995300293, Total Reward: 35.31191983384645, Q Loss: 253502.6484375, Actor Loss: -15229.473388671875
Episode 7107: Time: 0.27194833755493164, Total Reward: 219.9602481488312, Q Loss: 1902964.724609375, Actor Loss: -72725.41650390625
Episode 7108: Time: 0.30448341369628906, Total Reward: 250.01884618830448, Q Loss: 1982677.587890625, Actor Loss: -84066.81005859375
Episode 7109: Time: 0.3697023391723633, Total Reward: 305.7177954077009, Q Loss: 2731927.78125, Actor Loss: -99308.142578125
Episode 7110: Time: 0.23905134201049805, Total Reward: 194.17144671912462, Q Loss: 1489063.099609375, Actor Loss: -66837.95654296875
Episode 7111: Time: 0.22863245010375977, Total Reward: 183.51571857567777, Q Loss: 1634242.44921875, Actor Loss: -61503.611328125
Episode 7112: Time: 0.49873828887939453, Total Reward: 417.29812267605257, Q Loss: 3675938.951171875, Actor Loss: -136300.60546875
Episode 7113: Time: 0.17393898963928223, Total Reward: 138.40619833535698, Q Loss: 927982.91796875, Actor Loss: -46210.251953125
Episode 7114: Time: 0.19615387916564941, Total Reward: 155.15572241354758, Q Loss: 1188827.60546875, Actor Loss: -55513.80224609375
Episode 7115: Time: 0.25011634826660156, Total Reward: 203.4112323277416, Q Loss: 1611271.654296875, Actor Loss: -68893.32299804688
Episode 7116: Time: 0.4996681213378906, Total Reward: 417.5715362075144, Q Loss: 3974232.83203125, Actor Loss: -139355.27270507812
Episode 7117: Time: 0.2828366756439209, Total Reward: 230.10738875936497, Q Loss: 1886757.978515625, Actor Loss: -78859.07983398438
Episode 7118: Time: 0.48772764205932617, Total Reward: 408.8869370862963, Q Loss: 3665547.4453125, Actor Loss: -136469.91870117188
Episode 7119: Time: 0.2065577507019043, Total Reward: 165.72481065649518, Q Loss: 1549832.609375, Actor Loss: -57931.29638671875
Episode 7120: Time: 0.16346383094787598, Total Reward: 129.0068590074364, Q Loss: 1692991.07421875, Actor Loss: -45035.416748046875
Episode 7121: Time: 0.3366084098815918, Total Reward: 277.7049682427237, Q Loss: 2383476.8671875, Actor Loss: -91044.7783203125
Episode 7122: Time: 0.28214216232299805, Total Reward: 231.14061227805766, Q Loss: 2219553.26953125, Actor Loss: -77130.41577148438
Episode 7123: Time: 0.29289770126342773, Total Reward: 239.86745405061106, Q Loss: 2675398.7734375, Actor Loss: -79943.95068359375
Episode 7124: Time: 0.369152307510376, Total Reward: 305.78153197291783, Q Loss: 2806624.48046875, Actor Loss: -100252.22778320312

Episode 7125: Time: 0.4989967346191406, Total Reward: 417.83304685466993, Q Loss: 3822086.11328125, Actor Loss: -140841.9443359375
Episode 7126: Time: 0.28238940238952637, Total Reward: 230.6306564723734, Q Loss: 2538424.880859375, Actor Loss: -76849.5966796875
Episode 7127: Time: 0.37946009635925293, Total Reward: 315.35770645761903, Q Loss: 2660250.42578125, Actor Loss: -106920.35888671875
Episode 7128: Time: 0.4340033531188965, Total Reward: 361.50160708515335, Q Loss: 3540529.755859375, Actor Loss: -120614.33154296875
Episode 7129: Time: 0.29296207427978516, Total Reward: 239.4006882428397, Q Loss: 2030904.587890625, Actor Loss: -82603.9677734375
Episode 7130: Time: 0.15215039253234863, Total Reward: 119.59378353489669, Q Loss: 878159.61328125, Actor Loss: -43270.44482421875
Episode 7131: Time: 0.293060302734375, Total Reward: 240.06704609611464, Q Loss: 1990816.658203125, Actor Loss: -80220.27294921875
Episode 7132: Time: 0.108795166015625, Total Reward: 81.86235877343164, Q Loss: 899854.80859375, Actor Loss: -30350.22412109375
Episode 7133: Time: 0.2821009159088135, Total Reward: 231.4003892670394, Q Loss: 2466882.875, Actor Loss: -79141.1279296875
Episode 7134: Time: 0.20659565925598145, Total Reward: 163.73047855381344, Q Loss: 1491234.244140625, Actor Loss: -57262.16943359375
Episode 7135: Time: 0.4118843078613281, Total Reward: 340.70984308771233, Q Loss: 3724230.578125, Actor Loss: -114078.63525390625
Episode 7136: Time: 0.2930583953857422, Total Reward: 240.35999739659164, Q Loss: 2210596.435546875, Actor Loss: -83532.54711914062
Episode 7137: Time: 0.46720027923583984, Total Reward: 387.74572023719537, Q Loss: 2897180.69140625, Actor Loss: -129705.31640625
Episode 7138: Time: 0.35802388191223145, Total Reward: 296.87786132666156, Q Loss: 3400831.970703125, Actor Loss: -100104.90283203125
Episode 7139: Time: 0.5095455646514893, Total Reward: 425.6926077741423, Q Loss: 3839752.0791015625, Actor Loss: -140862.87133789062
Episode 7140: Time: 0.21749258041381836, Total Reward: 174.6230476135006, Q Loss: 1491516.9921875, Actor Loss: -61565.335205078125
Episode 7141: Time: 0.1195993423461914, Total Reward: 90.62077265205073, Q Loss: 929250.970703125, Actor Loss: -34357.650390625
Episode 7142: Time: 0.48833703994750977, Total Reward: 406.5775681088865, Q Loss: 3560381.4375, Actor Loss: -136001.4345703125
Episode 7143: Time: 0.3804442882537842, Total Reward: 313.83212065292946, Q Loss: 2852407.541015625, Actor Loss: -105205.447265625
Episode 7144: Time: 0.0871133804321289, Total Reward: 62.89341240518749, Q Loss: 629859.35546875, Actor Loss: -23781.6904296875
Episode 7145: Time: 0.22873830795288086, Total Reward: 183.57361433578308, Q Loss: 1374263.404296875, Actor Loss: -64319.347412109375
Episode 7146: Time: 0.479140043258667, Total Reward: 399.36972392811344, Q Loss: 3752396.349609375, Actor Loss: -129302.49780273438
Episode 7147: Time: 0.46735286712646484, Total Reward: 386.90886041684854, Q Loss: 3298932.982421875, Actor Loss: -131053.71118164062
Episode 7148: Time: 0.36961841583251953, Total Reward: 304.58418655936333, Q Loss: 2985771.380859375, Actor Loss: -102376.1416015625
Episode 7149: Time: 0.18508243560791016, Total Reward: 147.16410321576444, Q Loss: 1703541.05078125, Actor Loss: -51475.810302734375
Episode 7150: Time: 0.22829532623291016, Total Reward: 184.93749430104117, Q Loss: 1799400.875, Actor Loss: -64370.962890625
Episode 7151: Time: 0.30368685722351074, Total Reward: 248.3712493003426, Q Loss: 2151910.8203125, Actor Loss: -85047.24389648438
Episode 7152: Time: 0.32584166526794434, Total Reward: 268.48589492678457, Q Loss: 2570855.34765625, Actor Loss: -91453.77612304688

Episode 7153: Time: 0.3041813373565674, Total Reward: 247.47038663490775, Q Loss: 2762160.45703125, Actor Loss: -84978.0947265625
Episode 7154: Time: 0.7491035461425781, Total Reward: 631.8861558413856, Q Loss: 6222938.5, Actor Loss: -209168.40869140625
Episode 7155: Time: 0.3481624126434326, Total Reward: 285.3220177752093, Q Loss: 2193200.130859375, Actor Loss: -97344.88037109375
Episode 7156: Time: 0.39159703254699707, Total Reward: 321.9758598793772, Q Loss: 2728593.998046875, Actor Loss: -110443.2216796875
Episode 7157: Time: 0.2284679412841797, Total Reward: 184.65863797500754, Q Loss: 1499275.126953125, Actor Loss: -61455.28955078125
Episode 7158: Time: 0.3911166191101074, Total Reward: 324.32090041181016, Q Loss: 2792628.134765625, Actor Loss: -108193.65844726562
Episode 7159: Time: 0.4459655284881592, Total Reward: 370.1432583038415, Q Loss: 3813822.880859375, Actor Loss: -124775.91455078125
Episode 7160: Time: 0.5216326713562012, Total Reward: 435.08628414607307, Q Loss: 3949804.806640625, Actor Loss: -144698.62548828125
Episode 7161: Time: 0.17400145530700684, Total Reward: 138.02145493250717, Q Loss: 1101672.619140625, Actor Loss: -47256.935546875
Episode 7162: Time: 0.6302459239959717, Total Reward: 528.6489471455275, Q Loss: 5430979.861328125, Actor Loss: -178259.958984375
Episode 7163: Time: 0.1742560863494873, Total Reward: 137.39651431796665, Q Loss: 1158406.810546875, Actor Loss: -49106.46337890625
Episode 7164: Time: 0.3588719367980957, Total Reward: 296.4294681484745, Q Loss: 2903604.814453125, Actor Loss: -99268.05859375
Episode 7165: Time: 0.2619171142578125, Total Reward: 211.48869291635842, Q Loss: 2244348.099609375, Actor Loss: -74410.14672851562
Episode 7166: Time: 0.20721983909606934, Total Reward: 165.98851418546786, Q Loss: 1817319.796875, Actor Loss: -58462.846923828125
Episode 7167: Time: 0.5432264804840088, Total Reward: 453.5495460393395, Q Loss: 4037090.8662109375, Actor Loss: -154474.66674804688
Episode 7168: Time: 0.3376140594482422, Total Reward: 277.3694040358158, Q Loss: 2328841.00390625, Actor Loss: -96165.833984375
Episode 7169: Time: 0.31549882888793945, Total Reward: 257.44660284070926, Q Loss: 2200462.94140625, Actor Loss: -85753.041015625
Episode 7170: Time: 0.20677876472473145, Total Reward: 166.01251563670613, Q Loss: 1877856.51171875, Actor Loss: -58930.66650390625
Episode 7171: Time: 0.48925065994262695, Total Reward: 408.41387393790535, Q Loss: 3734900.630859375, Actor Loss: -138110.52905273438
Episode 7172: Time: 0.6951572895050049, Total Reward: 584.744358959998, Q Loss: 6114283.396484375, Actor Loss: -195759.18627929688
Episode 7173: Time: 0.33644628524780273, Total Reward: 277.34483365243386, Q Loss: 2742469.80859375, Actor Loss: -97178.7099609375
Episode 7174: Time: 0.2614290714263916, Total Reward: 211.0863782769871, Q Loss: 1804967.115234375, Actor Loss: -74960.39770507812
Episode 7175: Time: 0.35910940170288086, Total Reward: 295.10038874692526, Q Loss: 2736699.078125, Actor Loss: -100817.3505859375
Episode 7176: Time: 0.33753037452697754, Total Reward: 277.72595780434153, Q Loss: 2781724.783203125, Actor Loss: -97362.44604492188
Episode 7177: Time: 0.33683323860168457, Total Reward: 276.7359263264771, Q Loss: 2475736.37890625, Actor Loss: -96677.44555664062
Episode 7178: Time: 0.2938659191131592, Total Reward: 240.56832410651356, Q Loss: 2670799.607421875, Actor Loss: -81787.6337890625
Episode 7179: Time: 0.15302610397338867, Total Reward: 119.0145038529803, Q Loss: 1079539.888671875, Actor Loss: -42902.704833984375
Episode 7180: Time: 0.08780980110168457, Total Reward: 63.60387945729262, Q Loss: 832474.1875, Actor Loss: -23241.771484375

Episode 7181: Time: 0.3265976905822754, Total Reward: 269.05474390069656, Q Loss: 2505900.630859375, Actor Loss: -93536.78198242188
Episode 7182: Time: 0.2394700050354004, Total Reward: 193.4779805767666, Q Loss: 1767077.005859375, Actor Loss: -66628.91772460938
Episode 7183: Time: 0.2613248825073242, Total Reward: 211.32206936367413, Q Loss: 1943659.578125, Actor Loss: -73381.88232421875
Episode 7184: Time: 0.29371094703674316, Total Reward: 239.29727226835732, Q Loss: 3013350.283203125, Actor Loss: -84210.16259765625
Episode 7185: Time: 0.35838961601257324, Total Reward: 296.2899809558694, Q Loss: 3363863.052734375, Actor Loss: -101897.3173828125
Episode 7186: Time: 0.552595853805542, Total Reward: 464.304324382329, Q Loss: 4834175.544921875, Actor Loss: -156580.16064453125
Episode 7187: Time: 0.2929365634918213, Total Reward: 240.29213953134413, Q Loss: 2433985.505859375, Actor Loss: -82814.81884765625
Episode 7188: Time: 0.4016435146331787, Total Reward: 332.94769414032066, Q Loss: 3527340.33984375, Actor Loss: -115949.6962890625
Episode 7189: Time: 0.28249049186706543, Total Reward: 227.08550061167068, Q Loss: 2623409.599609375, Actor Loss: -79235.0810546875
Episode 7190: Time: 0.14150738716125488, Total Reward: 110.31929400033877, Q Loss: 1069200.9296875, Actor Loss: -39801.286865234375
Episode 7191: Time: 0.4346776008605957, Total Reward: 360.3409052620386, Q Loss: 3587238.9453125, Actor Loss: -126590.31372070312
Episode 7192: Time: 0.20712947845458984, Total Reward: 165.62046090569842, Q Loss: 1694995.56640625, Actor Loss: -59604.40185546875
Episode 7193: Time: 0.23970413208007812, Total Reward: 193.7504212617008, Q Loss: 2092772.189453125, Actor Loss: -67068.80419921875
Episode 7194: Time: 0.2826192378997803, Total Reward: 229.04550474943298, Q Loss: 1766829.251953125, Actor Loss: -79392.38916015625
Episode 7195: Time: 0.5974199771881104, Total Reward: 497.5467339338224, Q Loss: 5270927.94140625, Actor Loss: -169485.55029296875
Episode 7196: Time: 0.29381418228149414, Total Reward: 239.31046987260729, Q Loss: 2847587.623046875, Actor Loss: -82169.46899414062
Episode 7197: Time: 0.1522960662841797, Total Reward: 118.99767984861494, Q Loss: 1324587.75, Actor Loss: -45332.102294921875
Episode 7198: Time: 0.16409969329833984, Total Reward: 128.51173018476757, Q Loss: 1158292.6640625, Actor Loss: -45303.34521484375
Episode 7199: Time: 0.7818763256072998, Total Reward: 658.074331811913, Q Loss: 5842116.8359375, Actor Loss: -224459.36767578125
Validation Mean: 9355.222150636884, Validation Std: 0.4302313530482418
saving model
Episode 7200: Time: 0.42672252655029297, Total Reward: 352.21888765081246, Q Loss: 3084288.36328125, Actor Loss: -122857.49267578125
Episode 7201: Time: 0.14156222343444824, Total Reward: 109.24308091017248, Q Loss: 1035855.814453125, Actor Loss: -40936.16943359375
Episode 7202: Time: 0.2288961410522461, Total Reward: 183.48998990092602, Q Loss: 2125242.322265625, Actor Loss: -64415.972900390625
Episode 7203: Time: 0.30463194847106934, Total Reward: 248.3154833791859, Q Loss: 2274842.93359375, Actor Loss: -87734.44555664062
Episode 7204: Time: 0.3264327049255371, Total Reward: 267.8679372519741, Q Loss: 2298937.697265625, Actor Loss: -95681.06005859375
Episode 7205: Time: 0.2837095260620117, Total Reward: 230.42746189134536, Q Loss: 2695429.546875, Actor Loss: -83292.02221679688
Episode 7206: Time: 0.0764915943145752, Total Reward: 53.977965101403925, Q Loss: 539651.8203125, Actor Loss: -23258.56396484375
Episode 7207: Time: 0.46840739250183105, Total Reward: 389.0737948618695, Q Loss: 3843992.51171875, Actor Loss: -131889.00024414062

Episode 7208: Time: 0.31560325622558594, Total Reward: 258.5496697701942, Q Loss: 2477219.412109375, Actor Loss: -90886.43969726562
Episode 7209: Time: 0.11985325813293457, Total Reward: 91.33431025446184, Q Loss: 1145602.91796875, Actor Loss: -35398.23193359375
Episode 7210: Time: 0.07639956474304199, Total Reward: 53.73651788063294, Q Loss: 408141.890625, Actor Loss: -22162.86474609375
Episode 7211: Time: 0.4456512928009033, Total Reward: 369.3794890953927, Q Loss: 4183394.8515625, Actor Loss: -128247.71997070312
Episode 7212: Time: 0.31471896171569824, Total Reward: 258.3638133668794, Q Loss: 2860701.73046875, Actor Loss: -88272.93359375
Episode 7213: Time: 0.3928070068359375, Total Reward: 324.33854673692196, Q Loss: 3506626.23828125, Actor Loss: -109031.28125
Episode 7214: Time: 0.13080358505249023, Total Reward: 100.11852495157827, Q Loss: 1126500.984375, Actor Loss: -39220.118896484375
Episode 7215: Time: 0.2937188148498535, Total Reward: 238.68754037834663, Q Loss: 2690776.37109375, Actor Loss: -84718.37451171875
Episode 7216: Time: 0.23948049545288086, Total Reward: 193.16075226496076, Q Loss: 1841917.091796875, Actor Loss: -67770.24072265625
Episode 7217: Time: 0.4234035015106201, Total Reward: 351.8588983310913, Q Loss: 4005151.248046875, Actor Loss: -124383.55395507812
Episode 7218: Time: 0.5981459617614746, Total Reward: 497.5190432702397, Q Loss: 5008966.17578125, Actor Loss: -175324.32495117188
Episode 7219: Time: 0.3480236530303955, Total Reward: 286.24718715214135, Q Loss: 3542893.73046875, Actor Loss: -102085.47412109375
Episode 7220: Time: 0.3805525302886963, Total Reward: 314.8343087632766, Q Loss: 3089185.201171875, Actor Loss: -106751.74829101562
Episode 7221: Time: 0.4349832534790039, Total Reward: 359.4793569876112, Q Loss: 4121475.78515625, Actor Loss: -123930.37915039062
Episode 7222: Time: 0.47833681106567383, Total Reward: 398.9191318164645, Q Loss: 3985747.408203125, Actor Loss: -141774.26586914062
Episode 7223: Time: 0.28269410133361816, Total Reward: 229.94118467038015, Q Loss: 2072012.568359375, Actor Loss: -82545.80541992188
Episode 7224: Time: 0.2070024013519287, Total Reward: 163.9925182688451, Q Loss: 1435839.826171875, Actor Loss: -59352.280029296875
Episode 7225: Time: 0.4023711681365967, Total Reward: 333.1641442175202, Q Loss: 3986367.03515625, Actor Loss: -115552.03442382812
Episode 7226: Time: 0.3259289264678955, Total Reward: 267.7073879134049, Q Loss: 3326343.71484375, Actor Loss: -93979.380859375
Episode 7227: Time: 0.4245309829711914, Total Reward: 350.0201339606699, Q Loss: 4133644.810546875, Actor Loss: -123391.90405273438
Episode 7228: Time: 0.20677614212036133, Total Reward: 165.62905738283547, Q Loss: 2074265.52734375, Actor Loss: -60434.797119140625
Episode 7229: Time: 0.44614243507385254, Total Reward: 367.53441178528715, Q Loss: 3920620.33203125, Actor Loss: -129575.318359375
Episode 7230: Time: 0.3052859306335449, Total Reward: 248.8398770202524, Q Loss: 2561509.810546875, Actor Loss: -88244.96411132812
Episode 7231: Time: 0.19590520858764648, Total Reward: 155.77319817748702, Q Loss: 1793066.4375, Actor Loss: -56279.471923828125
Episode 7232: Time: 0.619647741317749, Total Reward: 519.5877702227061, Q Loss: 5707555.263671875, Actor Loss: -176046.25439453125
Episode 7233: Time: 0.40174293518066406, Total Reward: 333.7742077604049, Q Loss: 3010028.15625, Actor Loss: -118110.63110351562
Episode 7234: Time: 0.4996516704559326, Total Reward: 417.5692845305662, Q Loss: 4688225.931640625, Actor Loss: -144670.19165039062
Episode 7235: Time: 0.5540015697479248, Total Reward: 464.52478479042827, Q Loss: 4509868.962890625, Actor Loss: -164187.72973632812

Episode 7236: Time: 0.2285308837890625, Total Reward: 184.25714123872325, Q Loss: 1699661.306640625, Actor Loss: -67340.591796875
Episode 7237: Time: 0.2614307403564453, Total Reward: 211.4429786461438, Q Loss: 2575082.560546875, Actor Loss: -77002.87426757812
Episode 7238: Time: 0.2612264156341553, Total Reward: 211.30574857189072, Q Loss: 2346661.4921875, Actor Loss: -74471.8408203125
Episode 7239: Time: 0.14142060279846191, Total Reward: 110.06535518480025, Q Loss: 1015638.15625, Actor Loss: -38690.6025390625
Episode 7240: Time: 0.13080954551696777, Total Reward: 100.5246833798692, Q Loss: 1035072.79296875, Actor Loss: -38455.59765625
Episode 7241: Time: 0.4349551200866699, Total Reward: 361.31576553519466, Q Loss: 3717060.0546875, Actor Loss: -128839.75463867188
Episode 7242: Time: 0.3915367126464844, Total Reward: 322.1580304136287, Q Loss: 3305438.365234375, Actor Loss: -114914.55078125
Episode 7243: Time: 0.40194082260131836, Total Reward: 332.09157398204303, Q Loss: 3559258.18359375, Actor Loss: -118001.87963867188
Episode 7244: Time: 0.1957545280456543, Total Reward: 157.09379989978441, Q Loss: 1680598.353515625, Actor Loss: -58629.850830078125
Episode 7245: Time: 0.16350793838500977, Total Reward: 127.83943997082751, Q Loss: 1466653.0078125, Actor Loss: -48517.251953125
Episode 7246: Time: 0.1850719451904297, Total Reward: 145.91222039562192, Q Loss: 1452271.013671875, Actor Loss: -53186.08154296875
Episode 7247: Time: 0.6090090274810791, Total Reward: 510.842622766133, Q Loss: 5215002.466796875, Actor Loss: -176384.03344726562
Episode 7248: Time: 0.12137198448181152, Total Reward: 90.82298861563955, Q Loss: 962694.61328125, Actor Loss: -34463.977294921875
Episode 7249: Time: 0.31519222259521484, Total Reward: 259.1736859367387, Q Loss: 2177353.203125, Actor Loss: -92316.8818359375
Episode 7250: Time: 0.13028550148010254, Total Reward: 100.50604571850891, Q Loss: 1192932.84765625, Actor Loss: -38022.822509765625
Episode 7251: Time: 0.32624292373657227, Total Reward: 268.18011086995335, Q Loss: 2918023.119140625, Actor Loss: -94896.28198242188
Episode 7252: Time: 0.30423641204833984, Total Reward: 249.41730707448932, Q Loss: 2427446.072265625, Actor Loss: -89180.06298828125
Episode 7253: Time: 0.5643644332885742, Total Reward: 470.7770633165812, Q Loss: 4783489.77734375, Actor Loss: -167542.90795898438
Episode 7254: Time: 0.20665502548217773, Total Reward: 165.00661521739045, Q Loss: 2010347.32421875, Actor Loss: -59923.003662109375
Episode 7255: Time: 0.28191161155700684, Total Reward: 230.75005539946252, Q Loss: 2373251.4921875, Actor Loss: -83074.07495117188
Episode 7256: Time: 0.369706392288208, Total Reward: 305.56313867838037, Q Loss: 3067700.384765625, Actor Loss: -109649.5595703125
Episode 7257: Time: 0.36919093132019043, Total Reward: 305.1201482603371, Q Loss: 3498299.875, Actor Loss: -110399.12817382812
Episode 7258: Time: 0.10888886451721191, Total Reward: 82.06319099931137, Q Loss: 730317.994140625, Actor Loss: -32591.777587890625
Episode 7259: Time: 0.26117372512817383, Total Reward: 209.93607977492485, Q Loss: 2299476.048828125, Actor Loss: -78148.13598632812
Episode 7260: Time: 0.39155006408691406, Total Reward: 324.11046193015244, Q Loss: 2986337.318359375, Actor Loss: -115739.41650390625
Episode 7261: Time: 0.27163076400756836, Total Reward: 218.9161305256411, Q Loss: 2060885.859375, Actor Loss: -82316.54736328125
Episode 7262: Time: 0.11965656280517578, Total Reward: 91.26025402649782, Q Loss: 884184.4453125, Actor Loss: -34505.781982421875
Episode 7263: Time: 0.4339418411254883, Total Reward: 359.80016073586194, Q Loss: 3734321.41796875, Actor Loss: -127799.81494140625

Episode 7264: Time: 0.41322994232177734, Total Reward: 342.50426974697825, Q Loss: 3100658.642578125, Actor Loss: -123174.02172851562
Episode 7265: Time: 0.32615137100219727, Total Reward: 268.1591877100885, Q Loss: 2727854.02734375, Actor Loss: -92918.7548828125
Episode 7266: Time: 0.18488526344299316, Total Reward: 147.01921133602445, Q Loss: 1592517.294921875, Actor Loss: -53956.4404296875
Episode 7267: Time: 0.8247795104980469, Total Reward: 696.0048892191163, Q Loss: 7022524.302734375, Actor Loss: -247483.35180664062
Episode 7268: Time: 0.09812426567077637, Total Reward: 72.74975520041917, Q Loss: 772715.890625, Actor Loss: -28891.41845703125
Episode 7269: Time: 0.42418360710144043, Total Reward: 350.83548207826374, Q Loss: 4015267.09375, Actor Loss: -126087.46850585938
Episode 7270: Time: 0.6942441463470459, Total Reward: 585.1631823799114, Q Loss: 6281278.775390625, Actor Loss: -205525.06225585938
Episode 7271: Time: 0.737511396408081, Total Reward: 622.0640759020147, Q Loss: 6592950.896484375, Actor Loss: -221074.80395507812
Episode 7272: Time: 0.5001354217529297, Total Reward: 416.78921075502103, Q Loss: 4219349.58203125, Actor Loss: -147477.1357421875
Episode 7273: Time: 0.3907735347747803, Total Reward: 323.77062555121745, Q Loss: 3113653.4296875, Actor Loss: -117547.7861328125
Episode 7274: Time: 0.11956000328063965, Total Reward: 91.24788305714618, Q Loss: 1411208.5234375, Actor Loss: -36366.148681640625
Episode 7275: Time: 0.33707308769226074, Total Reward: 275.1545009997453, Q Loss: 2517870.06640625, Actor Loss: -103300.99169921875
Episode 7276: Time: 0.17401623725891113, Total Reward: 137.31065434460635, Q Loss: 1571870.24609375, Actor Loss: -52881.9453125
Episode 7277: Time: 0.542656660079956, Total Reward: 453.1218079958703, Q Loss: 4395334.017578125, Actor Loss: -162526.78955078125
Episode 7278: Time: 0.41306567192077637, Total Reward: 342.9693732654975, Q Loss: 2807023.314453125, Actor Loss: -125513.57446289062
Episode 7279: Time: 0.5422685146331787, Total Reward: 455.1354317611321, Q Loss: 5206797.958984375, Actor Loss: -163129.46606445312
Episode 7280: Time: 0.1630873680114746, Total Reward: 128.3228549009381, Q Loss: 1530998.6953125, Actor Loss: -46711.706787109375
Episode 7281: Time: 0.30498194694519043, Total Reward: 249.76381217525665, Q Loss: 2555449.31640625, Actor Loss: -90336.34106445312
Episode 7282: Time: 0.22833967208862305, Total Reward: 184.3863755444131, Q Loss: 2495752.75, Actor Loss: -70551.1435546875
Episode 7283: Time: 0.16318488121032715, Total Reward: 127.88085959488457, Q Loss: 1551006.2578125, Actor Loss: -49968.7177734375
Episode 7284: Time: 0.10921907424926758, Total Reward: 81.96380295400037, Q Loss: 834000.55078125, Actor Loss: -30531.51123046875
Episode 7285: Time: 0.42314982414245605, Total Reward: 349.6122986900688, Q Loss: 3523589.3671875, Actor Loss: -125727.83837890625
Episode 7286: Time: 0.23907184600830078, Total Reward: 193.39332701468032, Q Loss: 2069833.78515625, Actor Loss: -71064.8173828125
Episode 7287: Time: 0.5329022407531738, Total Reward: 444.18866397228857, Q Loss: 5268941.009765625, Actor Loss: -160897.77563476562
Episode 7288: Time: 0.1415395736694336, Total Reward: 110.28864510242441, Q Loss: 1069746.7265625, Actor Loss: -43806.3369140625
Episode 7289: Time: 0.5103070735931396, Total Reward: 424.77403192736233, Q Loss: 3996320.884765625, Actor Loss: -153718.86279296875
Episode 7290: Time: 0.17389988899230957, Total Reward: 137.24133929356267, Q Loss: 1931222.869140625, Actor Loss: -52085.17138671875
Episode 7291: Time: 0.6513886451721191, Total Reward: 547.7090722927918, Q Loss: 5915546.359375, Actor Loss: -195344.70556640625

Episode 7292: Time: 0.5215587615966797, Total Reward: 435.9515421663355, Q Loss: 4826326.46484375, Actor Loss: -156689.447265625
Episode 7293: Time: 0.5213770866394043, Total Reward: 435.43785048968516, Q Loss: 4819712.328125, Actor Loss: -156566.701171875
Episode 7294: Time: 0.45618414878845215, Total Reward: 377.71788142669214, Q Loss: 3886241.056640625, Actor Loss: -140625.04272460938
Episode 7295: Time: 0.16320157051086426, Total Reward: 128.48162844660712, Q Loss: 1843959.703125, Actor Loss: -51941.431640625
Episode 7296: Time: 0.2608456611633301, Total Reward: 210.9754722878509, Q Loss: 2535046.931640625, Actor Loss: -77372.77026367188
Episode 7297: Time: 0.5113131999969482, Total Reward: 425.69791324112674, Q Loss: 4637740.7109375, Actor Loss: -154921.85888671875
Episode 7298: Time: 0.2939004898071289, Total Reward: 239.7248077700008, Q Loss: 2325958.60546875, Actor Loss: -86993.30004882812
Episode 7299: Time: 0.6510484218597412, Total Reward: 547.1745620885706, Q Loss: 5907770.115234375, Actor Loss: -198202.7578125
Validation Mean: 9354.999159801802, Validation Std: 0.5723787183253206
saving model
Episode 7300: Time: 0.3783683776855469, Total Reward: 275.5110139356154, Q Loss: 3234968.8125, Actor Loss: -102938.75
Episode 7301: Time: 0.742241382598877, Total Reward: 612.1123603720752, Q Loss: 7099673.529296875, Actor Loss: -224430.23022460938
Episode 7302: Time: 0.5573174953460693, Total Reward: 462.19550174191863, Q Loss: 4964989.9375, Actor Loss: -165696.64770507812
Episode 7303: Time: 0.6000301837921143, Total Reward: 502.1742498486003, Q Loss: 6171139.6015625, Actor Loss: -183016.05322265625
Episode 7304: Time: 0.5014538764953613, Total Reward: 416.42228997872644, Q Loss: 4109141.21875, Actor Loss: -152649.57299804688
Episode 7305: Time: 0.41403722763061523, Total Reward: 342.80275773227845, Q Loss: 4141872.447265625, Actor Loss: -122283.36450195312
Episode 7306: Time: 0.09825897216796875, Total Reward: 72.70345016360682, Q Loss: 692241.421875, Actor Loss: -29344.019775390625
Episode 7307: Time: 0.6963868141174316, Total Reward: 584.0075365283036, Q Loss: 7044846.140625, Actor Loss: -213528.09838867188
Episode 7308: Time: 0.5011990070343018, Total Reward: 417.1461208779945, Q Loss: 4577494.587890625, Actor Loss: -151946.771484375
Episode 7309: Time: 0.41376185417175293, Total Reward: 341.94078417730384, Q Loss: 3388668.27734375, Actor Loss: -123537.2890625
Episode 7310: Time: 0.391603946685791, Total Reward: 324.0900268803895, Q Loss: 3852282.7265625, Actor Loss: -116542.18920898438
Episode 7311: Time: 0.27217841148376465, Total Reward: 221.64845227529008, Q Loss: 2887463.60546875, Actor Loss: -80237.42431640625
Episode 7312: Time: 0.15238070487976074, Total Reward: 116.91576831408467, Q Loss: 1254345.67578125, Actor Loss: -47546.348876953125
Episode 7313: Time: 0.13098669052124023, Total Reward: 100.57144363983434, Q Loss: 1431723.2421875, Actor Loss: -40274.8427734375
Episode 7314: Time: 0.510948657989502, Total Reward: 426.3696102799515, Q Loss: 4920993.06640625, Actor Loss: -154101.12915039062
Episode 7315: Time: 0.25020694732666016, Total Reward: 202.54118798802304, Q Loss: 2301668.26171875, Actor Loss: -77670.90502929688
Episode 7316: Time: 0.18459486961364746, Total Reward: 147.0921711955414, Q Loss: 1942960.05859375, Actor Loss: -54625.289306640625
Episode 7317: Time: 0.17454218864440918, Total Reward: 138.55522539745405, Q Loss: 1471368.890625, Actor Loss: -54856.9501953125
Episode 7318: Time: 0.15266871452331543, Total Reward: 118.62103023880672, Q Loss: 1539579.64453125, Actor Loss: -47267.914794921875

Episode 7319: Time: 0.4127795696258545, Total Reward: 343.70567136263236, Q Loss: 3771874.50390625, Actor Loss: -128266.82885742188
Episode 7320: Time: 0.20662522315979004, Total Reward: 165.84037179666132, Q Loss: 1839290.8046875, Actor Loss: -62419.744384765625
Episode 7321: Time: 0.26076364517211914, Total Reward: 210.03445982267172, Q Loss: 2207458.2421875, Actor Loss: -82196.359375
Episode 7322: Time: 0.1412961483001709, Total Reward: 109.9724832888851, Q Loss: 987969.88671875, Actor Loss: -43270.150146484375
Episode 7323: Time: 0.35855674743652344, Total Reward: 293.70918028417594, Q Loss: 3051909.59375, Actor Loss: -111602.77416992188
Episode 7324: Time: 0.2715725898742676, Total Reward: 219.44593146586956, Q Loss: 2810144.83984375, Actor Loss: -84757.03051757812
Episode 7325: Time: 0.42412543296813965, Total Reward: 351.7276806573581, Q Loss: 3296259.390625, Actor Loss: -129738.89721679688
Episode 7326: Time: 0.4028966426849365, Total Reward: 332.7947121404289, Q Loss: 4436263.578125, Actor Loss: -123347.57788085938
Episode 7327: Time: 0.9890363216400146, Total Reward: 835.9516531311741, Q Loss: 11456180.216796875, Actor Loss: -304458.6311035156
Episode 7328: Time: 0.1416778564453125, Total Reward: 109.63049098872514, Q Loss: 1533681.375, Actor Loss: -44941.02880859375
Episode 7329: Time: 0.19611668586730957, Total Reward: 156.7020781845713, Q Loss: 1589099.2109375, Actor Loss: -58948.00634765625
Episode 7330: Time: 0.2833220958709717, Total Reward: 228.37559136208495, Q Loss: 2579463.41796875, Actor Loss: -85376.5205078125
Episode 7331: Time: 0.7599680423736572, Total Reward: 641.6382537918428, Q Loss: 7036939.759765625, Actor Loss: -230629.0439453125
Episode 7332: Time: 0.17419099807739258, Total Reward: 138.0730341651196, Q Loss: 1496805.33203125, Actor Loss: -55705.052734375
Episode 7333: Time: 0.7059721946716309, Total Reward: 593.7149795391887, Q Loss: 7499398.4765625, Actor Loss: -213902.62670898438
Episode 7334: Time: 0.5334384441375732, Total Reward: 441.9749227105746, Q Loss: 5029536.140625, Actor Loss: -164150.82202148438
Episode 7335: Time: 0.09812355041503906, Total Reward: 72.83022875360552, Q Loss: 1017324.021484375, Actor Loss: -29393.65771484375
Episode 7336: Time: 0.2612886428833008, Total Reward: 211.81843749670526, Q Loss: 1827679.25390625, Actor Loss: -79500.4228515625
Episode 7337: Time: 0.3585066795349121, Total Reward: 296.2520396339061, Q Loss: 2702842.525390625, Actor Loss: -111051.201171875
Episode 7338: Time: 0.39133381843566895, Total Reward: 323.79246296376715, Q Loss: 4179861.05859375, Actor Loss: -120629.29174804688
Episode 7339: Time: 0.16312670707702637, Total Reward: 128.9197829709692, Q Loss: 1508249.935546875, Actor Loss: -50221.832275390625
Episode 7340: Time: 0.16327857971191406, Total Reward: 128.71486648032635, Q Loss: 1501258.5625, Actor Loss: -47712.30615234375
Episode 7341: Time: 0.3804285526275635, Total Reward: 314.0939545660399, Q Loss: 3382574.626953125, Actor Loss: -114590.89477539062
Episode 7342: Time: 0.23936104774475098, Total Reward: 191.20012100677158, Q Loss: 2180174.80078125, Actor Loss: -74236.83203125
Episode 7343: Time: 0.5002450942993164, Total Reward: 416.53372987268085, Q Loss: 5387779.98046875, Actor Loss: -155344.53540039062
Episode 7344: Time: 0.22880268096923828, Total Reward: 184.13883340986348, Q Loss: 2381886.46484375, Actor Loss: -71064.11669921875
Episode 7345: Time: 0.3372340202331543, Total Reward: 276.1306440478586, Q Loss: 3069143.78125, Actor Loss: -106973.05224609375
Episode 7346: Time: 0.39089441299438477, Total Reward: 321.70238951648724, Q Loss: 4079179.92578125, Actor Loss: -122531.87524414062

Episode 7347: Time: 0.09785819053649902, Total Reward: 72.32077907759847, Q Loss: 1079891.40234375, Actor Loss: -31393.760986328125
Episode 7348: Time: 0.09799766540527344, Total Reward: 72.36069669060798, Q Loss: 850473.65625, Actor Loss: -28299.38623046875
Episode 7349: Time: 0.0984961986541748, Total Reward: 72.0254780367297, Q Loss: 854905.37890625, Actor Loss: -30947.90673828125
Episode 7350: Time: 0.1525096893310547, Total Reward: 119.46269305281028, Q Loss: 1483753.515625, Actor Loss: -46655.47509765625
Episode 7351: Time: 0.40163493156433105, Total Reward: 332.01633221755264, Q Loss: 3553773.40234375, Actor Loss: -125382.81005859375
Episode 7352: Time: 0.21763324737548828, Total Reward: 173.45262458705736, Q Loss: 1825891.16015625, Actor Loss: -65877.26440429688
Episode 7353: Time: 0.22850847244262695, Total Reward: 183.00603039504313, Q Loss: 2083572.966796875, Actor Loss: -71612.1708984375
Episode 7354: Time: 0.15213727951049805, Total Reward: 118.47218065372867, Q Loss: 1398284.09765625, Actor Loss: -45889.2724609375
Episode 7355: Time: 0.34810829162597656, Total Reward: 286.7188225945148, Q Loss: 4127212.037109375, Actor Loss: -105018.28002929688
Episode 7356: Time: 0.369143009185791, Total Reward: 304.33367702163684, Q Loss: 3008497.791015625, Actor Loss: -115221.27661132812
Episode 7357: Time: 0.34810400009155273, Total Reward: 286.95548217294584, Q Loss: 3684689.958984375, Actor Loss: -107267.564453125
Episode 7358: Time: 0.3276784420013428, Total Reward: 266.68461114502037, Q Loss: 2929964.39453125, Actor Loss: -101147.505859375
Episode 7359: Time: 0.7058980464935303, Total Reward: 594.3054146234131, Q Loss: 7074265.513671875, Actor Loss: -219204.89404296875
Episode 7360: Time: 0.07670402526855469, Total Reward: 53.72395005847273, Q Loss: 644992.33984375, Actor Loss: -23255.601318359375
Episode 7361: Time: 0.456531286239624, Total Reward: 378.807039135839, Q Loss: 5106384.720703125, Actor Loss: -142740.22290039062
Episode 7362: Time: 0.3048512935638428, Total Reward: 248.23172155612303, Q Loss: 3135033.978515625, Actor Loss: -95331.35400390625
Episode 7363: Time: 0.3480958938598633, Total Reward: 285.33144198707186, Q Loss: 3113851.73046875, Actor Loss: -107355.48779296875
Episode 7364: Time: 0.4559314250946045, Total Reward: 380.0833128446889, Q Loss: 4504211.84765625, Actor Loss: -143316.57348632812
Episode 7365: Time: 0.3922281265258789, Total Reward: 323.5240353404318, Q Loss: 3405774.91796875, Actor Loss: -124114.78051757812
Episode 7366: Time: 0.33711910247802734, Total Reward: 276.9714306881993, Q Loss: 4005432.99609375, Actor Loss: -106643.7353515625
Episode 7367: Time: 0.31496500968933105, Total Reward: 259.46004247803825, Q Loss: 4079730.671875, Actor Loss: -98523.5
Episode 7368: Time: 0.1523439884185791, Total Reward: 119.40835212312632, Q Loss: 1421717.546875, Actor Loss: -49305.3623046875
Episode 7369: Time: 0.29408836364746094, Total Reward: 239.23773061014668, Q Loss: 2331057.9375, Actor Loss: -91154.79833984375
Episode 7370: Time: 0.20673656463623047, Total Reward: 165.88974085917746, Q Loss: 2023418.234375, Actor Loss: -64564.203857421875
Episode 7371: Time: 0.5858924388885498, Total Reward: 491.6467621115341, Q Loss: 5769527.240234375, Actor Loss: -183526.09887695312
Episode 7372: Time: 0.5536189079284668, Total Reward: 460.0707429364889, Q Loss: 5309171.6875, Actor Loss: -170918.1953125
Episode 7373: Time: 0.2941286563873291, Total Reward: 239.72879032543176, Q Loss: 2654566.33203125, Actor Loss: -90835.06274414062
Episode 7374: Time: 0.48978686332702637, Total Reward: 407.5626525427341, Q Loss: 4347500.5, Actor Loss: -152795.82470703125

Episode 7375: Time: 0.09798836708068848, Total Reward: 72.91750204235153, Q Loss: 1273140.390625, Actor Loss: -29469.970947265625
Episode 7376: Time: 0.2720150947570801, Total Reward: 221.00279000678248, Q Loss: 2780081.33203125, Actor Loss: -85475.92163085938
Episode 7377: Time: 0.1197354793548584, Total Reward: 91.44372248409496, Q Loss: 1263866.19921875, Actor Loss: -35950.96533203125
Episode 7378: Time: 0.22902750968933105, Total Reward: 183.07043562910047, Q Loss: 2905684.04296875, Actor Loss: -72464.44677734375
Episode 7379: Time: 0.1414172649383545, Total Reward: 109.87676589935646, Q Loss: 1782220.36328125, Actor Loss: -45431.3447265625
Episode 7380: Time: 0.283130407333374, Total Reward: 230.43264831218085, Q Loss: 3458095.48828125, Actor Loss: -88431.48046875
Episode 7381: Time: 0.07647418975830078, Total Reward: 53.59955920563139, Q Loss: 790644.15234375, Actor Loss: -23784.621826171875
Episode 7382: Time: 0.29439353942871094, Total Reward: 239.64172186671678, Q Loss: 3231095.703125, Actor Loss: -95826.21118164062
Episode 7383: Time: 0.08736824989318848, Total Reward: 63.065494853284825, Q Loss: 1140547.81640625, Actor Loss: -25877.19091796875
Episode 7384: Time: 0.5115752220153809, Total Reward: 426.56863272310056, Q Loss: 4960917.90625, Actor Loss: -164462.96142578125
Episode 7385: Time: 0.2504000663757324, Total Reward: 202.63155102570403, Q Loss: 2303032.44140625, Actor Loss: -78313.58129882812
Episode 7386: Time: 0.43491053581237793, Total Reward: 360.6964095934451, Q Loss: 4706418.943359375, Actor Loss: -137553.16430664062
Episode 7387: Time: 0.09813046455383301, Total Reward: 72.72208044843866, Q Loss: 1383342.515625, Actor Loss: -30181.269775390625
Episode 7388: Time: 0.23951363563537598, Total Reward: 191.09275615494968, Q Loss: 2505414.78515625, Actor Loss: -75767.70068359375
Episode 7389: Time: 0.40203022956848145, Total Reward: 332.9526346993482, Q Loss: 4020244.8359375, Actor Loss: -124440.68115234375
Episode 7390: Time: 0.23979735374450684, Total Reward: 191.41508471631568, Q Loss: 2531896.96484375, Actor Loss: -74795.39038085938
Episode 7391: Time: 0.2937893867492676, Total Reward: 239.00276269740135, Q Loss: 3163241.271484375, Actor Loss: -89952.90161132812
Episode 7392: Time: 0.38129305839538574, Total Reward: 312.449892938288, Q Loss: 3878153.634765625, Actor Loss: -121196.70654296875
Episode 7393: Time: 0.26132631301879883, Total Reward: 212.23936252204953, Q Loss: 2611291.05859375, Actor Loss: -80069.1298828125
Episode 7394: Time: 0.33814191818237305, Total Reward: 275.41185806517876, Q Loss: 4087462.8515625, Actor Loss: -106694.22827148438
Episode 7395: Time: 0.4789865016937256, Total Reward: 398.48868693676786, Q Loss: 4815077.904296875, Actor Loss: -151160.3095703125
Episode 7396: Time: 0.17425322532653809, Total Reward: 137.86063131712592, Q Loss: 1434725.59375, Actor Loss: -57522.58154296875
Episode 7397: Time: 0.0986628532409668, Total Reward: 72.99651299606202, Q Loss: 567190.32421875, Actor Loss: -31779.901123046875
Episode 7398: Time: 0.7711222171783447, Total Reward: 649.8497785802139, Q Loss: 8511463.005859375, Actor Loss: -245984.43090820312
Episode 7399: Time: 0.44580650329589844, Total Reward: 370.4314443306884, Q Loss: 4722865.044921875, Actor Loss: -142118.6376953125
Validation Mean: 9355.194164490855, Validation Std: 0.4352241420325059
saving model
Episode 7400: Time: 0.4041156768798828, Total Reward: 332.5070583934101, Q Loss: 3693662.390625, Actor Loss: -129502.33081054688
Episode 7401: Time: 0.3590736389160156, Total Reward: 296.785101811331, Q Loss: 3915083.681640625, Actor Loss: -115751.16918945312

Episode 7402: Time: 0.23975777626037598, Total Reward: 191.045313398973, Q Loss: 2853482.67578125, Actor Loss: -74211.01318359375
Episode 7403: Time: 0.217742919921875, Total Reward: 174.65628000841096, Q Loss: 2606899.97265625, Actor Loss: -68206.08081054688
Episode 7404: Time: 0.10887908935546875, Total Reward: 81.86778541252468, Q Loss: 1053196.216796875, Actor Loss: -34836.860595703125
Episode 7405: Time: 0.23982453346252441, Total Reward: 193.30816534779893, Q Loss: 2016626.248046875, Actor Loss: -75448.21923828125
Episode 7406: Time: 0.11967945098876953, Total Reward: 91.32869771725758, Q Loss: 1295469.90625, Actor Loss: -35823.05810546875
Episode 7407: Time: 0.12023520469665527, Total Reward: 90.94213862457784, Q Loss: 1565689.21484375, Actor Loss: -37548.02978515625
Episode 7408: Time: 0.3913722038269043, Total Reward: 324.1951847384546, Q Loss: 3841220.236328125, Actor Loss: -124348.81762695312
Episode 7409: Time: 0.10900044441223145, Total Reward: 82.07118226547091, Q Loss: 1053399.9296875, Actor Loss: -34432.9697265625
Episode 7410: Time: 0.30451345443725586, Total Reward: 248.25589192859118, Q Loss: 3458097.828125, Actor Loss: -96908.0439453125
Episode 7411: Time: 0.20679044723510742, Total Reward: 163.52716231877176, Q Loss: 2318476.23828125, Actor Loss: -65390.6474609375
Episode 7412: Time: 0.33707737922668457, Total Reward: 278.19130935341445, Q Loss: 3667429.27734375, Actor Loss: -106706.67065429688
Episode 7413: Time: 0.17427587509155273, Total Reward: 137.83069056465968, Q Loss: 1503606.169921875, Actor Loss: -55950.168212890625
Episode 7414: Time: 0.4668252468109131, Total Reward: 388.3868368565891, Q Loss: 4911284.1875, Actor Loss: -147335.29028320312
Episode 7415: Time: 0.11957669258117676, Total Reward: 91.76457531381253, Q Loss: 1024954.3515625, Actor Loss: -37688.740966796875
Episode 7416: Time: 0.20711112022399902, Total Reward: 165.59000727549045, Q Loss: 2431656.28515625, Actor Loss: -67732.89208984375
Episode 7417: Time: 0.1958010196685791, Total Reward: 157.00581330183525, Q Loss: 1546070.65234375, Actor Loss: -63228.281982421875
Episode 7418: Time: 0.9987483024597168, Total Reward: 845.5112264339512, Q Loss: 10112877.353515625, Actor Loss: -318970.3337402344
Episode 7419: Time: 0.46756529808044434, Total Reward: 388.79668815380523, Q Loss: 5383584.689453125, Actor Loss: -148944.21020507812
Episode 7420: Time: 0.4678194522857666, Total Reward: 387.7566360279692, Q Loss: 5152824.4375, Actor Loss: -151880.43969726562
Episode 7421: Time: 0.18485569953918457, Total Reward: 147.40645768786743, Q Loss: 2109489.3984375, Actor Loss: -59938.79833984375
Episode 7422: Time: 0.2940363883972168, Total Reward: 239.65519835242367, Q Loss: 2783916.1875, Actor Loss: -93901.88256835938
Episode 7423: Time: 0.0981285572052002, Total Reward: 72.42176608993523, Q Loss: 816502.32421875, Actor Loss: -32977.0517578125
Episode 7424: Time: 0.2506370544433594, Total Reward: 201.5142804183956, Q Loss: 2583218.37890625, Actor Loss: -80824.0576171875
Episode 7425: Time: 0.44548821449279785, Total Reward: 368.34173049133136, Q Loss: 4519132.515625, Actor Loss: -146180.3466796875
Episode 7426: Time: 0.5431883335113525, Total Reward: 454.22342814609436, Q Loss: 5499669.484375, Actor Loss: -175768.42822265625
Episode 7427: Time: 0.44617199897766113, Total Reward: 369.79108249184895, Q Loss: 5246730.5078125, Actor Loss: -144495.77587890625
Episode 7428: Time: 0.33740687370300293, Total Reward: 276.62489074729723, Q Loss: 3267631.474609375, Actor Loss: -106597.66625976562
Episode 7429: Time: 0.1743772029876709, Total Reward: 137.73258430381674, Q Loss: 1951554.71484375, Actor Loss: -56678.09423828125

Episode 7430: Time: 0.5326402187347412, Total Reward: 445.64301651113726, Q Loss: 5370674.759765625, Actor Loss: -168734.86596679688
Episode 7431: Time: 0.3375988006591797, Total Reward: 277.5506161587783, Q Loss: 3550664.01953125, Actor Loss: -108676.41015625
Episode 7432: Time: 0.31543874740600586, Total Reward: 258.65557316758833, Q Loss: 3172961.53125, Actor Loss: -103560.58129882812
Episode 7433: Time: 0.5549643039703369, Total Reward: 463.97160229682373, Q Loss: 6503240.248046875, Actor Loss: -173976.71704101562
Episode 7434: Time: 0.29452943801879883, Total Reward: 241.23388961894096, Q Loss: 3320248.25390625, Actor Loss: -93138.4658203125
Episode 7435: Time: 0.489121675491333, Total Reward: 405.5886117187726, Q Loss: 4894983.5390625, Actor Loss: -160509.50634765625
Episode 7436: Time: 0.20738577842712402, Total Reward: 166.15706801521222, Q Loss: 1873305.60546875, Actor Loss: -65513.78759765625
Episode 7437: Time: 0.6189296245574951, Total Reward: 519.3022876345947, Q Loss: 7538548.3125, Actor Loss: -197129.6455078125
Episode 7438: Time: 0.35875773429870605, Total Reward: 295.53011254720974, Q Loss: 4036291.0390625, Actor Loss: -118522.74169921875
Episode 7439: Time: 0.2396242618560791, Total Reward: 191.978516355091, Q Loss: 2896417.49609375, Actor Loss: -76966.39111328125
Episode 7440: Time: 0.5543606281280518, Total Reward: 463.24880162023726, Q Loss: 6883362.99609375, Actor Loss: -183797.544921875
Episode 7441: Time: 0.2833085060119629, Total Reward: 230.2609584704573, Q Loss: 3162148.83203125, Actor Loss: -90693.43969726562
Episode 7442: Time: 0.09812617301940918, Total Reward: 72.45605742678751, Q Loss: 964016.421875, Actor Loss: -31881.227294921875
Episode 7443: Time: 0.15259766578674316, Total Reward: 119.37631126345538, Q Loss: 1555398.21875, Actor Loss: -48429.84716796875
Episode 7444: Time: 0.3166234493255615, Total Reward: 259.6664191931093, Q Loss: 3624932.62890625, Actor Loss: -100707.08056640625
Episode 7445: Time: 0.25055694580078125, Total Reward: 203.07807742265126, Q Loss: 2643923.236328125, Actor Loss: -80334.19262695312
Episode 7446: Time: 0.5005204677581787, Total Reward: 413.4877633694464, Q Loss: 5085076.2265625, Actor Loss: -161510.29028320312
Episode 7447: Time: 0.5108742713928223, Total Reward: 425.5123033333408, Q Loss: 5174819.052734375, Actor Loss: -166460.49975585938
Episode 7448: Time: 0.37004590034484863, Total Reward: 303.6135928976882, Q Loss: 4182299.0625, Actor Loss: -120384.46411132812
Episode 7449: Time: 0.2722790241241455, Total Reward: 222.1481658121273, Q Loss: 2862473.7265625, Actor Loss: -88052.74340820312
Episode 7450: Time: 0.15225720405578613, Total Reward: 119.19633442993937, Q Loss: 1860649.63671875, Actor Loss: -51976.48876953125
Episode 7451: Time: 0.23963260650634766, Total Reward: 192.99297696018127, Q Loss: 2478365.41796875, Actor Loss: -76650.8916015625
Episode 7452: Time: 0.19573974609375, Total Reward: 155.92145598817933, Q Loss: 2312450.2265625, Actor Loss: -62812.677001953125
Episode 7453: Time: 0.1744544506072998, Total Reward: 137.80139254701277, Q Loss: 1474766.833984375, Actor Loss: -56745.911376953125
Episode 7454: Time: 0.27213406562805176, Total Reward: 218.15832873602767, Q Loss: 2675581.36328125, Actor Loss: -88481.68432617188
Episode 7455: Time: 0.7052631378173828, Total Reward: 593.7855710632458, Q Loss: 6952030.6171875, Actor Loss: -228420.8330078125
Episode 7456: Time: 0.9450557231903076, Total Reward: 799.2407730122063, Q Loss: 9504562.123046875, Actor Loss: -307027.5803222656
Episode 7457: Time: 0.7502706050872803, Total Reward: 629.6012591688983, Q Loss: 8409482.7109375, Actor Loss: -242422.58544921875

Episode 7458: Time: 0.6625711917877197, Total Reward: 555.1583987790157, Q Loss: 7751482.6015625, Actor Loss: -216117.64599609375
Episode 7459: Time: 0.10925102233886719, Total Reward: 82.16912205431761, Q Loss: 1344872.48046875, Actor Loss: -35210.058837890625
Episode 7460: Time: 0.1204214096069336, Total Reward: 90.61353815327182, Q Loss: 1280954.80859375, Actor Loss: -39023.313720703125
Episode 7461: Time: 0.7393147945404053, Total Reward: 622.8128438966863, Q Loss: 7356249.666015625, Actor Loss: -242035.45141601562
Episode 7462: Time: 0.6519098281860352, Total Reward: 546.0842164128778, Q Loss: 7417392.2568359375, Actor Loss: -218269.94262695312
Episode 7463: Time: 0.14161133766174316, Total Reward: 109.80246592505522, Q Loss: 1291604.34765625, Actor Loss: -47615.6640625
Episode 7464: Time: 0.17437267303466797, Total Reward: 138.06074998100465, Q Loss: 1628058.392578125, Actor Loss: -57713.51513671875
Episode 7465: Time: 0.23940658569335938, Total Reward: 193.2946590382854, Q Loss: 2565493.41015625, Actor Loss: -73456.55810546875
Episode 7466: Time: 0.4455087184906006, Total Reward: 368.4465164451314, Q Loss: 4764345.513671875, Actor Loss: -147040.31762695312
Episode 7467: Time: 0.7378871440887451, Total Reward: 620.2510938749505, Q Loss: 9046537.1953125, Actor Loss: -240547.76293945312
Episode 7468: Time: 1.0208690166473389, Total Reward: 863.8987669030969, Q Loss: 12389173.291015625, Actor Loss: -334413.42822265625
Episode 7469: Time: 0.15253496170043945, Total Reward: 118.54925155880515, Q Loss: 1179079.78125, Actor Loss: -51127.581787109375
Episode 7470: Time: 0.3152899742126465, Total Reward: 257.93072939873326, Q Loss: 2935509.662109375, Actor Loss: -102903.66870117188
Episode 7471: Time: 0.5977914333343506, Total Reward: 501.3844324743133, Q Loss: 6398638.74609375, Actor Loss: -195475.33251953125
Episode 7472: Time: 0.11992549896240234, Total Reward: 91.68073477623456, Q Loss: 1287568.7890625, Actor Loss: -38252.07958984375
Episode 7473: Time: 0.34813594818115234, Total Reward: 286.7019027105721, Q Loss: 3204818.84375, Actor Loss: -111244.04248046875
Episode 7474: Time: 0.47826313972473145, Total Reward: 397.00055115516017, Q Loss: 6001812.1171875, Actor Loss: -157903.86743164062
Episode 7475: Time: 0.10892963409423828, Total Reward: 82.41298169457984, Q Loss: 1405193.68359375, Actor Loss: -36560.719970703125
Episode 7476: Time: 0.38098716735839844, Total Reward: 314.638969829151, Q Loss: 4285105.2578125, Actor Loss: -124781.732421875
Episode 7477: Time: 0.11980223655700684, Total Reward: 91.26257317543687, Q Loss: 1182383.57421875, Actor Loss: -39957.198486328125
Episode 7478: Time: 0.47773027420043945, Total Reward: 398.6310597831202, Q Loss: 5237120.35546875, Actor Loss: -155510.06372070312
Episode 7479: Time: 0.48849940299987793, Total Reward: 407.3446772504257, Q Loss: 5416344.4921875, Actor Loss: -162860.2412109375
Episode 7480: Time: 0.1522235870361328, Total Reward: 118.25496736026976, Q Loss: 2378982.19921875, Actor Loss: -49363.944091796875
Episode 7481: Time: 0.09861016273498535, Total Reward: 72.62142091761557, Q Loss: 1321543.95703125, Actor Loss: -33107.07958984375
Episode 7482: Time: 0.22830486297607422, Total Reward: 184.39400423231592, Q Loss: 2444316.625, Actor Loss: -75605.23876953125
Episode 7483: Time: 0.3693063259124756, Total Reward: 305.0910399817886, Q Loss: 4547031.59375, Actor Loss: -123767.54370117188
Episode 7484: Time: 0.39156579971313477, Total Reward: 324.2921576871168, Q Loss: 4673805.734375, Actor Loss: -129386.302734375
Episode 7485: Time: 0.5647475719451904, Total Reward: 473.1848511328126, Q Loss: 6761064.58984375, Actor Loss: -190892.48706054688

Episode 7486: Time: 0.163222074508667, Total Reward: 128.86395002717381, Q Loss: 1908571.07421875, Actor Loss: -55480.516357421875
Episode 7487: Time: 0.4562234878540039, Total Reward: 379.3303619534032, Q Loss: 4874642.99609375, Actor Loss: -150202.82421875
Episode 7488: Time: 0.19580674171447754, Total Reward: 156.60104777981897, Q Loss: 2266891.80078125, Actor Loss: -63654.80712890625
Episode 7489: Time: 0.10947728157043457, Total Reward: 81.88396499542144, Q Loss: 1505299.36328125, Actor Loss: -37412.304443359375
Episode 7490: Time: 0.39206790924072266, Total Reward: 324.6308890040675, Q Loss: 4928699.015625, Actor Loss: -128303.29223632812
Episode 7491: Time: 0.3159215450286865, Total Reward: 259.44067233558553, Q Loss: 4013212.421875, Actor Loss: -106727.26513671875
Episode 7492: Time: 0.1089165210723877, Total Reward: 81.551177016531, Q Loss: 1045262.8828125, Actor Loss: -34745.439453125
Episode 7493: Time: 0.4023580551147461, Total Reward: 332.34551753417196, Q Loss: 4968634.6953125, Actor Loss: -133505.77075195312
Episode 7494: Time: 0.15232181549072266, Total Reward: 119.46017950668823, Q Loss: 1779454.75, Actor Loss: -51082.478271484375
Episode 7495: Time: 0.7052135467529297, Total Reward: 594.283892990949, Q Loss: 8195938.30078125, Actor Loss: -232616.85522460938
Episode 7496: Time: 0.48821330070495605, Total Reward: 407.3627379006531, Q Loss: 5256660.12109375, Actor Loss: -165217.47680664062
Episode 7497: Time: 0.17388701438903809, Total Reward: 138.02894076684453, Q Loss: 1912136.57421875, Actor Loss: -59398.305419921875
Episode 7498: Time: 0.32639050483703613, Total Reward: 268.164063386939, Q Loss: 3914160.37109375, Actor Loss: -108846.08251953125
Episode 7499: Time: 0.251145601272583, Total Reward: 202.004638762293, Q Loss: 2966712.26171875, Actor Loss: -85930.20947265625
Validation Mean: 9354.331460567828, Validation Std: 0.30692307640816846
saving model
Episode 7500: Time: 0.284435510635376, Total Reward: 230.78758571383847, Q Loss: 2771848.73828125, Actor Loss: -92929.99047851562
Episode 7501: Time: 0.1631755828857422, Total Reward: 128.1288621418078, Q Loss: 1937198.01953125, Actor Loss: -51425.897216796875
Episode 7502: Time: 0.36973118782043457, Total Reward: 305.89766582557013, Q Loss: 4075615.109375, Actor Loss: -123937.07934570312
Episode 7503: Time: 0.4347381591796875, Total Reward: 360.4484740490435, Q Loss: 4540804.859375, Actor Loss: -143327.9892578125
Episode 7504: Time: 0.5003688335418701, Total Reward: 416.729362169880133, Q Loss: 5504361.796875, Actor Loss: -167752.67333984375
Episode 7505: Time: 0.4356112480163574, Total Reward: 359.8575379406821, Q Loss: 5231462.81640625, Actor Loss: -147073.5224609375
Episode 7506: Time: 0.15232062339782715, Total Reward: 118.92099535744315, Q Loss: 1774343.484375, Actor Loss: -49434.310791015625
Episode 7507: Time: 0.6191504001617432, Total Reward: 519.9417052936469, Q Loss: 6979629.083984375, Actor Loss: -206937.20434570312
Episode 7508: Time: 0.17417597770690918, Total Reward: 137.6141967250314, Q Loss: 2593019.884765625, Actor Loss: -58039.12451171875
Episode 7509: Time: 0.20728206634521484, Total Reward: 166.2121362632459, Q Loss: 2252053.375, Actor Loss: -70568.46264648438
Episode 7510: Time: 0.900867223739624, Total Reward: 761.7294988056167, Q Loss: 9357783.87890625, Actor Loss: -304640.49072265625
Episode 7511: Time: 0.32651662826538086, Total Reward: 265.88098756711247, Q Loss: 3095671.83984375, Actor Loss: -108480.86206054688
Episode 7512: Time: 0.6405258178710938, Total Reward: 535.5524133825826, Q Loss: 7146178.962890625, Actor Loss: -212106.85815429688

Episode 7513: Time: 0.5746753215789795, Total Reward: 482.6590236717486, Q Loss: 6311502.171875, Actor Loss: -195568.326171875
Episode 7514: Time: 0.1411890983581543, Total Reward: 109.91048103827104, Q Loss: 1554890.203125, Actor Loss: -49836.3876953125
Episode 7515: Time: 0.10934185981750488, Total Reward: 81.97668824609931, Q Loss: 1134196.7265625, Actor Loss: -35557.556640625
Episode 7516: Time: 0.49010276794433594, Total Reward: 409.0696063368756, Q Loss: 5743651.125, Actor Loss: -166549.2705078125
Episode 7517: Time: 0.20694231986999512, Total Reward: 166.20132500629856, Q Loss: 2547514.73046875, Actor Loss: -70927.82348632812
Episode 7518: Time: 0.2723078727722168, Total Reward: 219.60878024189105, Q Loss: 3010153.333984375, Actor Loss: -91021.34619140625
Episode 7519: Time: 0.1199800968170166, Total Reward: 91.44229715109923, Q Loss: 2123901.21875, Actor Loss: -39617.6513671875
Episode 7520: Time: 0.3699033260345459, Total Reward: 303.9275058084083, Q Loss: 5556915.9921875, Actor Loss: -121476.57080078125
Episode 7521: Time: 0.15229558944702148, Total Reward: 118.717200603769, Q Loss: 1730752.34765625, Actor Loss: -51255.9736328125
Episode 7522: Time: 0.326124906539917, Total Reward: 267.1252970464661, Q Loss: 4212185.97265625, Actor Loss: -108495.97119140625
Episode 7523: Time: 0.4020872116088867, Total Reward: 334.29898762837496, Q Loss: 5176558.173828125, Actor Loss: -138481.138671875
Episode 7524: Time: 0.2612299919128418, Total Reward: 210.35296018090088, Q Loss: 2936225.03515625, Actor Loss: -85661.35791015625
Episode 7525: Time: 0.4020380973815918, Total Reward: 333.520101690222, Q Loss: 4821281.46875, Actor Loss: -135698.546875
Episode 7526: Time: 0.2504267692565918, Total Reward: 202.90984356281047, Q Loss: 3230321.9140625, Actor Loss: -82583.49951171875
Episode 7527: Time: 0.5758607387542725, Total Reward: 479.76400487437627, Q Loss: 6081079.12890625, Actor Loss: -190698.166015625
Episode 7528: Time: 0.13048958778381348, Total Reward: 100.89841649641833, Q Loss: 1307449.359375, Actor Loss: -43713.767333984375
Episode 7529: Time: 0.1524190902709961, Total Reward: 119.0678601583114, Q Loss: 2189691.640625, Actor Loss: -50925.378173828125
Episode 7530: Time: 0.1737992763519287, Total Reward: 138.0610873167631, Q Loss: 2019126.587890625, Actor Loss: -58691.395751953125
Episode 7531: Time: 0.1200406551361084, Total Reward: 91.17604629520874, Q Loss: 1258658.90625, Actor Loss: -39890.449462890625
Episode 7532: Time: 0.38004350662231445, Total Reward: 311.4638975859818, Q Loss: 3955550.68359375, Actor Loss: -127762.96020507812
Episode 7533: Time: 0.39136195182800293, Total Reward: 323.7731593501928, Q Loss: 4092153.7734375, Actor Loss: -131153.65283203125
Episode 7534: Time: 0.2832038402557373, Total Reward: 230.09173351277158, Q Loss: 3296537.4453125, Actor Loss: -96026.43701171875
Episode 7535: Time: 0.2613718509674072, Total Reward: 210.85417887926707, Q Loss: 2890671.25390625, Actor Loss: -89531.13134765625
Episode 7536: Time: 0.28298401832580566, Total Reward: 229.7212302702985, Q Loss: 3134978.822265625, Actor Loss: -94999.19213867188
Episode 7537: Time: 0.13101768493652344, Total Reward: 101.21554132125253, Q Loss: 1615776.9609375, Actor Loss: -42695.0712890625
Episode 7538: Time: 0.2827341556549072, Total Reward: 230.23926195941425, Q Loss: 3501399.3359375, Actor Loss: -95706.19995117188
Episode 7539: Time: 0.23938846588134766, Total Reward: 192.27187517181554, Q Loss: 2755280.46875, Actor Loss: -82586.47338867188
Episode 7540: Time: 0.2068769931793213, Total Reward: 166.25493587773764, Q Loss: 2729368.970703125, Actor Loss: -69511.8154296875

Episode 7541: Time: 0.11968302726745605, Total Reward: 91.5949874509542, Q Loss: 1402544.40234375, Actor Loss: -40161.85595703125
Episode 7542: Time: 0.20717644691467285, Total Reward: 166.06300360732703, Q Loss: 1991509.0859375, Actor Loss: -69773.37915039062
Episode 7543: Time: 0.40244436264038086, Total Reward: 333.1099839596882, Q Loss: 4672777.78125, Actor Loss: -134303.32666015625
Episode 7544: Time: 0.36988329887390137, Total Reward: 304.4031834808739, Q Loss: 4531024.4921875, Actor Loss: -130797.38159179688
Episode 7545: Time: 0.21750903129577637, Total Reward: 174.65768763785687, Q Loss: 2207393.35546875, Actor Loss: -75501.78686523438
Episode 7546: Time: 0.5429496765136719, Total Reward: 452.213123001417, Q Loss: 6504291.439453125, Actor Loss: -180103.8779296875
Episode 7547: Time: 0.17404413223266602, Total Reward: 137.956104520833, Q Loss: 2031129.9296875, Actor Loss: -56076.409912109375
Episode 7548: Time: 0.18503499031066895, Total Reward: 146.8269250629215, Q Loss: 1996737.796875, Actor Loss: -61631.86279296875
Episode 7549: Time: 0.3795318603515625, Total Reward: 312.59162486140445, Q Loss: 4101925.96875, Actor Loss: -130050.83911132812
Episode 7550: Time: 0.09801149368286133, Total Reward: 72.04411014036982, Q Loss: 1119936.25, Actor Loss: -32928.6826171875
Episode 7551: Time: 0.31511545181274414, Total Reward: 259.0466983754585, Q Loss: 3200324.6875, Actor Loss: -106768.66040039062
Episode 7552: Time: 0.3044304847717285, Total Reward: 249.39374833493255, Q Loss: 3131541.81640625, Actor Loss: -102699.11254882812
Episode 7553: Time: 0.3693685531616211, Total Reward: 303.14779755499836, Q Loss: 5050821.7890625, Actor Loss: -122007.05029296875
Episode 7554: Time: 0.3482096195220947, Total Reward: 286.46502957983415, Q Loss: 3829777.822265625, Actor Loss: -119210.84301757812
Episode 7555: Time: 0.31550097465515137, Total Reward: 257.8166684896028, Q Loss: 3618679.6875, Actor Loss: -107993.08056640625
Episode 7556: Time: 0.2832818031311035, Total Reward: 229.48199427106383, Q Loss: 3227373.59375, Actor Loss: -95042.53662109375
Episode 7557: Time: 0.1631910800933838, Total Reward: 128.81637871390043, Q Loss: 1861897.9140625, Actor Loss: -53812.9951171875
Episode 7558: Time: 0.3155972957611084, Total Reward: 257.36528556964, Q Loss: 3562996.962890625, Actor Loss: -108153.68383789062
Episode 7559: Time: 0.31583070755004883, Total Reward: 257.52187513697424, Q Loss: 4374616.77734375, Actor Loss: -109240.72998046875
Episode 7560: Time: 0.7387971878051758, Total Reward: 621.7220877318098, Q Loss: 9057626.40625, Actor Loss: -251313.359375
Episode 7561: Time: 0.32619714736938477, Total Reward: 267.9510064515158, Q Loss: 5385450.9140625, Actor Loss: -111405.05151367188
Episode 7562: Time: 0.2394108772277832, Total Reward: 194.20595469406373, Q Loss: 2637828.34375, Actor Loss: -80545.50708007812
Episode 7563: Time: 0.36960673332214355, Total Reward: 303.2518263646457, Q Loss: 4440271.19140625, Actor Loss: -124475.47241210938
Episode 7564: Time: 0.8674194812774658, Total Reward: 733.4569098283635, Q Loss: 10552427.6328125, Actor Loss: -299093.74755859375
Episode 7565: Time: 0.5105819702148438, Total Reward: 424.21964417944525, Q Loss: 5661785.21875, Actor Loss: -176345.9658203125
Episode 7566: Time: 0.10911369323730469, Total Reward: 82.07070185705584, Q Loss: 1399547.4296875, Actor Loss: -37844.879638671875
Episode 7567: Time: 0.12006878852844238, Total Reward: 91.75072622095051, Q Loss: 1450176.06640625, Actor Loss: -38560.552001953125
Episode 7568: Time: 0.32238197326660156, Total Reward: 247.00387759917902, Q Loss: 4203708.17578125, Actor Loss: -105439.49340820312

Episode 7569: Time: 0.3727226257324219, Total Reward: 294.17210822642244, Q Loss: 4070220.55859375, Actor Loss: -121719.21240234375
Episode 7570: Time: 0.49317264556884766, Total Reward: 396.99088309647203, Q Loss: 5996657.451171875, Actor Loss: -162632.77587890625
Episode 7571: Time: 0.240678071975708, Total Reward: 194.12933790401678, Q Loss: 3111184.8046875, Actor Loss: -81606.60913085938
Episode 7572: Time: 0.3818941116333008, Total Reward: 315.0712685172333, Q Loss: 4558073.63671875, Actor Loss: -128475.14892578125
Episode 7573: Time: 0.2178184986114502, Total Reward: 175.2609782464201, Q Loss: 2573304.083984375, Actor Loss: -76977.97290039062
Episode 7574: Time: 0.2831094264984131, Total Reward: 230.49786360518107, Q Loss: 3326125.1015625, Actor Loss: -96964.93212890625
Episode 7575: Time: 0.28272461891174316, Total Reward: 230.03901936892873, Q Loss: 2732045.51953125, Actor Loss: -93450.884765625
Episode 7576: Time: 0.2937510013580322, Total Reward: 240.27287015978794, Q Loss: 3614271.48828125, Actor Loss: -101396.40576171875
Episode 7577: Time: 0.14137053489685059, Total Reward: 110.20591339776607, Q Loss: 1452599.33203125, Actor Loss: -47920.89404296875
Episode 7578: Time: 0.5534029006958008, Total Reward: 464.00162190207334, Q Loss: 6199449.96484375, Actor Loss: -193272.19165039062
Episode 7579: Time: 0.23953557014465332, Total Reward: 193.46794361849427, Q Loss: 3097442.1875, Actor Loss: -83108.54125976562
Episode 7580: Time: 0.19532299041748047, Total Reward: 155.96015630922963, Q Loss: 1559773.48046875, Actor Loss: -68799.82836914062
Episode 7581: Time: 0.24018216133117676, Total Reward: 193.50789411717128, Q Loss: 3384181.90234375, Actor Loss: -83166.74267578125
Episode 7582: Time: 0.3372635841369629, Total Reward: 277.30631409129126, Q Loss: 4189798.64453125, Actor Loss: -114835.8095703125
Episode 7583: Time: 0.5651750564575195, Total Reward: 473.0208952716451, Q Loss: 6380810.6796875, Actor Loss: -193403.13671875
Episode 7584: Time: 0.630143404006958, Total Reward: 529.6412679668745, Q Loss: 7112394.380859375, Actor Loss: -219142.77294921875
Episode 7585: Time: 0.845787525177002, Total Reward: 715.8386146313325, Q Loss: 11684254.57421875, Actor Loss: -298131.5305175781
Episode 7586: Time: 0.34850454330444336, Total Reward: 283.28517923819584, Q Loss: 3946762.890625, Actor Loss: -122221.91088867188
Episode 7587: Time: 0.48935747146606445, Total Reward: 407.61779900260444, Q Loss: 5178283.671875, Actor Loss: -168108.2666015625
Episode 7588: Time: 0.13068151473999023, Total Reward: 100.69556618533045, Q Loss: 2124831.60546875, Actor Loss: -47499.49462890625
Episode 7589: Time: 0.10926628112792969, Total Reward: 82.24216170543262, Q Loss: 1764380.0078125, Actor Loss: -36239.418701171875
Episode 7590: Time: 0.6084995269775391, Total Reward: 509.4298748540187, Q Loss: 6922665.23046875, Actor Loss: -214102.12475585938
Episode 7591: Time: 0.250657320022583, Total Reward: 202.8621817681978, Q Loss: 3277172.02734375, Actor Loss: -84163.03857421875
Episode 7592: Time: 0.4131753444671631, Total Reward: 341.69520465556366, Q Loss: 5472617.3828125, Actor Loss: -142784.43872070312
Episode 7593: Time: 0.27207255363464355, Total Reward: 221.49395556813062, Q Loss: 4625930.2109375, Actor Loss: -92486.5986328125
Episode 7594: Time: 0.20715641975402832, Total Reward: 166.50096780694446, Q Loss: 2288997.314453125, Actor Loss: -76291.06811523438
Episode 7595: Time: 0.13076186180114746, Total Reward: 100.49133950345222, Q Loss: 1420330.671875, Actor Loss: -43450.97265625
Episode 7596: Time: 0.4671211242675781, Total Reward: 388.9260651041197, Q Loss: 6016565.12109375, Actor Loss: -159215.3876953125

Episode 7597: Time: 0.3493037223815918, Total Reward: 286.7531841245447, Q Loss: 3453046.16015625, Actor Loss: -123219.0068359375
Episode 7598: Time: 0.20776677131652832, Total Reward: 165.3422111153427, Q Loss: 1935173.33203125, Actor Loss: -72639.71020507812
Episode 7599: Time: 0.7706665992736816, Total Reward: 648.9108292284551, Q Loss: 10395653.787109375, Actor Loss: -269573.10888671875
Validation Mean: 9355.027736776361, Validation Std: 0.5125863421315566
saving model
Episode 7600: Time: 0.19765019416809082, Total Reward: 155.66115370375178, Q Loss: 2995324.06640625, Actor Loss: -70114.26684570312
Episode 7601: Time: 0.16360211372375488, Total Reward: 128.3519782088402, Q Loss: 2399353.6328125, Actor Loss: -56612.715576171875
Episode 7602: Time: 0.2180790901184082, Total Reward: 174.511339634622, Q Loss: 2439681.07421875, Actor Loss: -78799.14770507812
Episode 7603: Time: 0.3042449951171875, Total Reward: 249.07458297627772, Q Loss: 3925987.17578125, Actor Loss: -105764.11840820312
Episode 7604: Time: 0.09820747375488281, Total Reward: 71.91721886000306, Q Loss: 1437471.4921875, Actor Loss: -35267.002685546875
Episode 7605: Time: 0.163787841796875, Total Reward: 128.57452366407978, Q Loss: 1673092.99609375, Actor Loss: -56293.593017578125
Episode 7606: Time: 0.8036830425262451, Total Reward: 677.4984458603561, Q Loss: 9746391.09765625, Actor Loss: -281895.912109375
Episode 7607: Time: 0.19541335105895996, Total Reward: 156.87531739679702, Q Loss: 2539462.25, Actor Loss: -68175.16064453125
Episode 7608: Time: 0.3263247013092041, Total Reward: 267.5660956584295, Q Loss: 3606236.130859375, Actor Loss: -110895.46557617188
Episode 7609: Time: 0.5972216129302979, Total Reward: 500.1421333645729, Q Loss: 7670240.67578125, Actor Loss: -211819.63647460938
Episode 7610: Time: 0.31542420387268066, Total Reward: 258.04029728864293, Q Loss: 4373014.953125, Actor Loss: -111091.712890625
Episode 7611: Time: 0.3365519046783447, Total Reward: 277.097277232459, Q Loss: 3998441.791015625, Actor Loss: -116775.73315429688
Episode 7612: Time: 0.8568389415740967, Total Reward: 725.2627651954191, Q Loss: 10983381.6875, Actor Loss: -299457.6032714844
Episode 7613: Time: 0.34768199920654297, Total Reward: 286.3006287391289, Q Loss: 2828093.865234375, Actor Loss: -123215.63208007812
Episode 7614: Time: 0.2610139846801758, Total Reward: 211.95418716679546, Q Loss: 3114151.0234375, Actor Loss: -92089.892578125
Episode 7615: Time: 0.4343860149383545, Total Reward: 360.2925132556546, Q Loss: 6195180.1953125, Actor Loss: -152876.37963867188
Episode 7616: Time: 1.182494878768921, Total Reward: 1001.416565670498, Q Loss: 15112605.587890625, Actor Loss: -416346.6862792969
Episode 7617: Time: 0.3920779228210449, Total Reward: 323.4039623596858, Q Loss: 5100912.0546875, Actor Loss: -138094.84423828125
Episode 7618: Time: 0.5763323307037354, Total Reward: 481.78474573608827, Q Loss: 6058944.982421875, Actor Loss: -200183.28881835938
Episode 7619: Time: 0.5647790431976318, Total Reward: 472.28136821358225, Q Loss: 7529168.94140625, Actor Loss: -202774.02172851562
Episode 7620: Time: 0.2611565589904785, Total Reward: 212.05441724816646, Q Loss: 2910117.9765625, Actor Loss: -93851.09375
Episode 7621: Time: 0.15222501754760742, Total Reward: 118.01326462447085, Q Loss: 1597968.6484375, Actor Loss: -52566.4130859375
Episode 7622: Time: 0.6958174705505371, Total Reward: 585.1177286207576, Q Loss: 8580103.611328125, Actor Loss: -248633.53100585938
Episode 7623: Time: 0.08737921714782715, Total Reward: 62.53962498058277, Q Loss: 923941.9140625, Actor Loss: -31135.090576171875

Episode 7624: Time: 0.30489253997802734, Total Reward: 249.947078093239, Q Loss: 3007659.140625, Actor Loss: -110619.86791992188
Episode 7625: Time: 0.23961973190307617, Total Reward: 194.15742306350478, Q Loss: 2687258.0, Actor Loss: -84517.23193359375
Episode 7626: Time: 0.5975518226623535, Total Reward: 500.3548744118921, Q Loss: 7472729.78125, Actor Loss: -215114.50463867188
Episode 7627: Time: 0.597264289855957, Total Reward: 500.4356615050265, Q Loss: 8108255.5390625, Actor Loss: -214383.423828125
Episode 7628: Time: 0.22890615463256836, Total Reward: 182.54783231803543, Q Loss: 3070349.4296875, Actor Loss: -83495.60913085938
Episode 7629: Time: 0.29396533966064453, Total Reward: 238.47880303323012, Q Loss: 3338572.994140625, Actor Loss: -103494.18041992188
Episode 7630: Time: 0.16367435455322266, Total Reward: 128.14571101360852, Q Loss: 2208703.5625, Actor Loss: -56777.743408203125
Episode 7631: Time: 0.141801118850708, Total Reward: 109.81821069348807, Q Loss: 1906893.87890625, Actor Loss: -49611.21484375
Episode 7632: Time: 0.23918724060058594, Total Reward: 193.30397210424144, Q Loss: 3579814.921875, Actor Loss: -84981.796875
Episode 7633: Time: 0.10912251472473145, Total Reward: 82.13871974015149, Q Loss: 1424292.0859375, Actor Loss: -37701.128662109375
Episode 7634: Time: 0.21810078620910645, Total Reward: 173.26695391518066, Q Loss: 2725401.87890625, Actor Loss: -78769.18994140625
Episode 7635: Time: 0.7385456562042236, Total Reward: 621.673214210298, Q Loss: 9949673.623046875, Actor Loss: -263707.3142089844
Episode 7636: Time: 0.3373260498046875, Total Reward: 277.2026014408084, Q Loss: 5186473.97265625, Actor Loss: -119677.94262695312
Episode 7637: Time: 0.3382833003997803, Total Reward: 277.184391278864, Q Loss: 4449137.65625, Actor Loss: -118437.20092773438
Episode 7638: Time: 0.39260077476501465, Total Reward: 324.39208574047865, Q Loss: 5359791.3828125, Actor Loss: -135416.44946289062
Episode 7639: Time: 0.35926127433776855, Total Reward: 295.9466587718031, Q Loss: 6542426.859375, Actor Loss: -127379.98046875
Episode 7640: Time: 0.3056521415710449, Total Reward: 249.20363663469965, Q Loss: 4299808.203125, Actor Loss: -110687.75415039062
Episode 7641: Time: 0.23979640007019043, Total Reward: 193.8279126508756, Q Loss: 3044228.009765625, Actor Loss: -85373.712890625
Episode 7642: Time: 0.18506956100463867, Total Reward: 147.38130816781717, Q Loss: 2091286.8359375, Actor Loss: -66073.41064453125
Episode 7643: Time: 1.020880937576294, Total Reward: 863.4482111613986, Q Loss: 13088205.328125, Actor Loss: -362557.3498535156
Episode 7644: Time: 0.3593289852142334, Total Reward: 296.88329637447345, Q Loss: 4295925.3828125, Actor Loss: -127044.98095703125
Episode 7645: Time: 0.14148831367492676, Total Reward: 110.0845017032221, Q Loss: 1942070.28515625, Actor Loss: -50543.895751953125
Episode 7646: Time: 0.3693978786468506, Total Reward: 305.0225395066855, Q Loss: 4733213.46875, Actor Loss: -132028.98779296875
Episode 7647: Time: 0.9982059001922607, Total Reward: 845.1213110717579, Q Loss: 12569305.859375, Actor Loss: -357642.564453125
Episode 7648: Time: 0.5104496479034424, Total Reward: 426.7695884773608, Q Loss: 6692505.39453125, Actor Loss: -184330.05444335938
Episode 7649: Time: 0.3590970039367676, Total Reward: 295.03586978822375, Q Loss: 4789432.5546875, Actor Loss: -124788.99365234375
Episode 7650: Time: 0.17417693138122559, Total Reward: 138.12578732469055, Q Loss: 1900740.11328125, Actor Loss: -62580.2509765625
Episode 7651: Time: 0.32624340057373047, Total Reward: 266.848590970863, Q Loss: 4391080.51953125, Actor Loss: -117054.380859375

Episode 7652: Time: 0.30537891387939453, Total Reward: 248.23445002783012, Q Loss: 5251112.59375, Actor Loss: -110369.41918945312
Episode 7653: Time: 0.43550658226013184, Total Reward: 360.8282037947038, Q Loss: 5748781.908203125, Actor Loss: -157721.11767578125
Episode 7654: Time: 0.6741197109222412, Total Reward: 566.6716937835645, Q Loss: 9956923.88671875, Actor Loss: -237917.49755859375
Episode 7655: Time: 0.40256476402282715, Total Reward: 333.30684005356403, Q Loss: 4876807.99609375, Actor Loss: -146264.814453125
Episode 7656: Time: 0.17443490028381348, Total Reward: 137.27830082869272, Q Loss: 2396326.0625, Actor Loss: -62918.597412109375
Episode 7657: Time: 0.5002942085266113, Total Reward: 415.24663378644254, Q Loss: 6318347.03125, Actor Loss: -185538.6533203125
Episode 7658: Time: 0.2936122417449951, Total Reward: 239.7606028636801, Q Loss: 3921951.671875, Actor Loss: -107006.21508789062
Episode 7659: Time: 0.5317418575286865, Total Reward: 444.3337862212589, Q Loss: 7267621.0390625, Actor Loss: -189677.06469726562
Episode 7660: Time: 0.2182626724243164, Total Reward: 175.21224833687384, Q Loss: 2784757.328125, Actor Loss: -79244.85107421875
Episode 7661: Time: 0.5971488952636719, Total Reward: 501.1924902412035, Q Loss: 8425942.50390625, Actor Loss: -215612.96069335938
Episode 7662: Time: 0.2829720973968506, Total Reward: 229.72836304196298, Q Loss: 3055998.703125, Actor Loss: -100345.76196289062
Episode 7663: Time: 0.08803629875183105, Total Reward: 62.662529416766944, Q Loss: 1259358.61328125, Actor Loss: -33276.429443359375
Episode 7664: Time: 0.18599271774291992, Total Reward: 146.47249807906968, Q Loss: 2386453.685546875, Actor Loss: -64332.544189453125
Episode 7665: Time: 0.28314208984375, Total Reward: 229.64469208571143, Q Loss: 4518534.765625, Actor Loss: -102350.55004882812
Episode 7666: Time: 0.2619917392730713, Total Reward: 210.81054486717917, Q Loss: 3432456.83984375, Actor Loss: -92045.81713867188
Episode 7667: Time: 0.5756947994232178, Total Reward: 482.14175673708695, Q Loss: 7509802.232421875, Actor Loss: -207501.42749023438
Episode 7668: Time: 0.34807491302490234, Total Reward: 286.8153520895013, Q Loss: 5334753.17578125, Actor Loss: -127420.89819335938
Episode 7669: Time: 0.10881924629211426, Total Reward: 81.33334648724487, Q Loss: 1412905.88671875, Actor Loss: -41801.724365234375
Episode 7670: Time: 0.21783041954040527, Total Reward: 175.254489054218, Q Loss: 2571511.1171875, Actor Loss: -78534.6005859375
Episode 7671: Time: 0.2934443950653076, Total Reward: 241.00128069903116, Q Loss: 3870794.58203125, Actor Loss: -103611.91967773438
Episode 7672: Time: 0.44576191902160645, Total Reward: 370.1803357952783, Q Loss: 5412444.43359375, Actor Loss: -160881.69995117188
Episode 7673: Time: 0.348128080368042, Total Reward: 286.5127558187474, Q Loss: 3512391.484375, Actor Loss: -125669.00390625
Episode 7674: Time: 0.9122920036315918, Total Reward: 771.2826284178572, Q Loss: 13084853.935546875, Actor Loss: -334587.0051269531
Episode 7675: Time: 0.2829158306121826, Total Reward: 230.73328814868776, Q Loss: 3323013.875, Actor Loss: -104274.484375
Episode 7676: Time: 0.2504005432128906, Total Reward: 202.92149652276214, Q Loss: 2432858.80859375, Actor Loss: -89771.681640625
Episode 7677: Time: 0.22854304313659668, Total Reward: 184.2855788187247, Q Loss: 3372742.6640625, Actor Loss: -83162.45654296875
Episode 7678: Time: 0.34839868545532227, Total Reward: 286.8752531934622, Q Loss: 6060723.4453125, Actor Loss: -129131.28173828125
Episode 7679: Time: 0.28365349769592285, Total Reward: 228.46053009241555, Q Loss: 2789923.20703125, Actor Loss: -103473.119140625

Episode 7680: Time: 0.20694851875305176, Total Reward: 165.65793199595444, Q Loss: 3263527.3125, Actor Loss: -72238.36767578125
Episode 7681: Time: 0.2831578254699707, Total Reward: 231.17931356032537, Q Loss: 4180590.576171875, Actor Loss: -106764.59350585938
Episode 7682: Time: 1.0535728931427002, Total Reward: 892.1089700783739, Q Loss: 14536552.484375, Actor Loss: -389923.90966796875
Episode 7683: Time: 0.15265846252441406, Total Reward: 119.3740652332986, Q Loss: 2688322.6640625, Actor Loss: -57395.89990234375
Episode 7684: Time: 0.4792187213897705, Total Reward: 398.33872686634436, Q Loss: 6511524.4765625, Actor Loss: -175157.09765625
Episode 7685: Time: 0.283444881439209, Total Reward: 230.70674552594448, Q Loss: 3497891.875, Actor Loss: -104654.77221679688
Episode 7686: Time: 0.500420093536377, Total Reward: 415.88274915946005, Q Loss: 6012725.453125, Actor Loss: -180498.4677734375
Episode 7687: Time: 0.2832036018371582, Total Reward: 230.12041953005553, Q Loss: 4187963.15625, Actor Loss: -102142.5732421875
Episode 7688: Time: 0.9893379211425781, Total Reward: 837.4303396619302, Q Loss: 12522513.859375, Actor Loss: -362187.1240234375
Episode 7689: Time: 0.7283644676208496, Total Reward: 612.8333028295997, Q Loss: 9455388.05859375, Actor Loss: -269986.6501464844
Episode 7690: Time: 0.22899293899536133, Total Reward: 184.8484554932132, Q Loss: 2438321.92578125, Actor Loss: -82590.35693359375
Episode 7691: Time: 0.1524052619934082, Total Reward: 118.4949346522137, Q Loss: 1994641.625, Actor Loss: -56564.815673828125
Episode 7692: Time: 0.17460346221923828, Total Reward: 137.57861284453003, Q Loss: 2385312.06640625, Actor Loss: -63622.016357421875
Episode 7693: Time: 0.25102877616882324, Total Reward: 201.12805582474334, Q Loss: 2573693.087890625, Actor Loss: -93403.59008789062
Episode 7694: Time: 0.08745050430297852, Total Reward: 63.0104892302041, Q Loss: 1561407.3984375, Actor Loss: -32954.9033203125
Episode 7695: Time: 0.22860336303710938, Total Reward: 183.34382298550224, Q Loss: 3250884.828125, Actor Loss: -86490.7177734375
Episode 7696: Time: 0.18481659889221191, Total Reward: 146.6536441088647, Q Loss: 1914533.640625, Actor Loss: -67428.76171875
Episode 7697: Time: 0.2286531925201416, Total Reward: 184.13917780544034, Q Loss: 4027830.79296875, Actor Loss: -81935.78564453125
Episode 7698: Time: 0.19589495658874512, Total Reward: 157.0994480401804, Q Loss: 2748270.6640625, Actor Loss: -72048.1015625
Episode 7699: Time: 0.19589710235595703, Total Reward: 155.32520005389665, Q Loss: 2359960.89453125, Actor Loss: -70081.92163085938
Validation Mean: 9353.557835535683, Validation Std: 0.2682808642208507
saving model
Episode 7700: Time: 0.1072840690612793, Total Reward: 100.19771486114347, Q Loss: 2473421.3046875, Actor Loss: -48656.8291015625
Episode 7701: Time: 0.2655360698699951, Total Reward: 266.59800193719883, Q Loss: 4780082.63671875, Actor Loss: -123077.79125976562
Episode 7702: Time: 0.2564218044281006, Total Reward: 257.3509762154856, Q Loss: 4123859.34375, Actor Loss: -115982.763671875
Episode 7703: Time: 0.4851052761077881, Total Reward: 499.65815790651163, Q Loss: 8170798.08203125, Actor Loss: -220341.25122070312
Episode 7704: Time: 0.18528509140014648, Total Reward: 184.15560831755803, Q Loss: 3018601.171875, Actor Loss: -84681.22680664062
Episode 7705: Time: 0.22116708755493164, Total Reward: 221.20763726819402, Q Loss: 3036940.5, Actor Loss: -99573.30346679688
Episode 7706: Time: 0.37940263748168945, Total Reward: 388.1326922982092, Q Loss: 7102286.90234375, Actor Loss: -170528.42700195312

Episode 7707: Time: 0.5055563449859619, Total Reward: 519.6487267266423, Q Loss: 7677840.9375, Actor Loss: -230051.80883789062
Episode 7708: Time: 0.1769425868988037, Total Reward: 175.32367902333232, Q Loss: 2473951.125, Actor Loss: -82799.34838867188
Episode 7709: Time: 0.3619530200958252, Total Reward: 370.66761667938954, Q Loss: 5800943.8203125, Actor Loss: -164892.50561523438
Episode 7710: Time: 0.7144417762756348, Total Reward: 742.2789891739784, Q Loss: 11637706.328125, Actor Loss: -318746.47509765625
Episode 7711: Time: 0.3442976474761963, Total Reward: 352.34449792020325, Q Loss: 5082912.06640625, Actor Loss: -158214.80859375
Episode 7712: Time: 0.42402005195617676, Total Reward: 436.2996357005091, Q Loss: 7749393.6015625, Actor Loss: -190767.24780273438
Episode 7713: Time: 0.6173112392425537, Total Reward: 640.0451347286005, Q Loss: 10432447.57421875, Actor Loss: -282882.3786621094
Episode 7714: Time: 0.05332493782043457, Total Reward: 44.45782106031117, Q Loss: 1287383.078125, Actor Loss: -25288.630615234375
Episode 7715: Time: 0.44978761672973633, Total Reward: 464.5750602780503, Q Loss: 7712318.9765625, Actor Loss: -204771.01098632812
Episode 7716: Time: 0.21220064163208008, Total Reward: 210.19049326938043, Q Loss: 3551816.25390625, Actor Loss: -94412.73461914062
Episode 7717: Time: 0.27396655082702637, Total Reward: 277.4055335540978, Q Loss: 4657702.7421875, Actor Loss: -123677.89794921875
Episode 7718: Time: 0.2387235164642334, Total Reward: 238.76726244659082, Q Loss: 5122420.265625, Actor Loss: -107643.009765625
Episode 7719: Time: 0.6795468330383301, Total Reward: 704.7179128210464, Q Loss: 10476996.419921875, Actor Loss: -310601.4909667969
Episode 7720: Time: 0.4689457416534424, Total Reward: 481.4919130476186, Q Loss: 8087996.56640625, Actor Loss: -214172.93286132812
Episode 7721: Time: 0.43205904960632324, Total Reward: 445.0220477623066, Q Loss: 7058864.7265625, Actor Loss: -199517.86450195312
Episode 7722: Time: 0.21264290809631348, Total Reward: 212.47778387095286, Q Loss: 3058343.140625, Actor Loss: -97066.42504882812
Episode 7723: Time: 0.10557150840759277, Total Reward: 100.6811834388647, Q Loss: 1680806.7734375, Actor Loss: -47878.241455078125
Episode 7724: Time: 0.1100161075592041, Total Reward: 100.20933668368347, Q Loss: 1622695.6796875, Actor Loss: -49242.76416015625
Episode 7725: Time: 0.2579805850982666, Total Reward: 256.8229836282001, Q Loss: 3786878.84375, Actor Loss: -117226.17895507812
Episode 7726: Time: 0.2732572555541992, Total Reward: 277.53670457630756, Q Loss: 5206661.234375, Actor Loss: -128098.82104492188
Episode 7727: Time: 0.3877885341644287, Total Reward: 397.9504533390124, Q Loss: 6260479.91015625, Actor Loss: -178591.06518554688
Episode 7728: Time: 0.5277464389801025, Total Reward: 547.9424665399364, Q Loss: 9499139.0625, Actor Loss: -242324.78295898438
Episode 7729: Time: 0.1234290599822998, Total Reward: 119.02236488438363, Q Loss: 2067934.984375, Actor Loss: -56511.549072265625
Episode 7730: Time: 0.2741405963897705, Total Reward: 277.10556664965253, Q Loss: 4587409.734375, Actor Loss: -125892.30224609375
Episode 7731: Time: 0.3884720802307129, Total Reward: 399.4679838280391, Q Loss: 7098784.85546875, Actor Loss: -180216.54345703125
Episode 7732: Time: 0.08870816230773926, Total Reward: 81.82381250796719, Q Loss: 1409199.640625, Actor Loss: -43216.69580078125
Episode 7733: Time: 0.31784701347351074, Total Reward: 321.4506585415076, Q Loss: 5072100.8984375, Actor Loss: -147712.005859375
Episode 7734: Time: 0.27341175079345703, Total Reward: 277.1763948384528, Q Loss: 4234541.63671875, Actor Loss: -128506.75439453125

Episode 7735: Time: 0.17624831199645996, Total Reward: 175.93403110259706, Q Loss: 3888364.859375, Actor Loss: -85477.31958007812
Episode 7736: Time: 0.21254396438598633, Total Reward: 212.54186007057567, Q Loss: 3282679.35546875, Actor Loss: -95632.3857421875
Episode 7737: Time: 0.2032933235168457, Total Reward: 202.93580318671644, Q Loss: 3108459.6484375, Actor Loss: -93839.70458984375
Episode 7738: Time: 0.22980141639709473, Total Reward: 231.33266066515063, Q Loss: 4147285.10546875, Actor Loss: -105507.3603515625
Episode 7739: Time: 0.13222265243530273, Total Reward: 128.6621408848787, Q Loss: 2151420.25, Actor Loss: -59696.087890625
Episode 7740: Time: 0.2032163143157959, Total Reward: 203.0713229320363, Q Loss: 3030836.9765625, Actor Loss: -89930.99243164062
Episode 7741: Time: 0.22300982475280762, Total Reward: 221.5318735625878, Q Loss: 3505847.92578125, Actor Loss: -102365.27612304688
Episode 7742: Time: 0.0973348617553711, Total Reward: 91.41199671515893, Q Loss: 1915441.390625, Actor Loss: -45586.372802734375
Episode 7743: Time: 0.07077741622924805, Total Reward: 63.38530266723168, Q Loss: 1481956.8203125, Actor Loss: -32304.438720703125
Episode 7744: Time: 0.29943394660949707, Total Reward: 306.3598670586336, Q Loss: 5945327.5625, Actor Loss: -142292.630859375
Episode 7745: Time: 0.14984917640686035, Total Reward: 147.5507679472033, Q Loss: 2359083.0, Actor Loss: -70091.787109375
Episode 7746: Time: 0.1768968105316162, Total Reward: 174.7513871741834, Q Loss: 3341574.73046875, Actor Loss: -81852.2568359375
Episode 7747: Time: 0.1674482822418213, Total Reward: 164.96974404003103, Q Loss: 3138927.73828125, Actor Loss: -79723.986328125
Episode 7748: Time: 0.18554377555847168, Total Reward: 184.52071672398804, Q Loss: 4308050.8359375, Actor Loss: -87921.80322265625
Episode 7749: Time: 0.4583461284637451, Total Reward: 472.1256005034877, Q Loss: 7615921.8515625, Actor Loss: -213876.294921875
Episode 7750: Time: 0.2998697757720947, Total Reward: 305.5167690671093, Q Loss: 5772133.6640625, Actor Loss: -140563.73095703125
Episode 7751: Time: 0.2732372283935547, Total Reward: 277.64977537929633, Q Loss: 5148989.1875, Actor Loss: -127733.220703125
Episode 7752: Time: 0.20325827598571777, Total Reward: 201.06661341972455, Q Loss: 3373041.3203125, Actor Loss: -93125.18798828125
Episode 7753: Time: 0.09704041481018066, Total Reward: 91.68029415174226, Q Loss: 1917672.109375, Actor Loss: -47200.052001953125
Episode 7754: Time: 0.21222805976867676, Total Reward: 210.22966991741336, Q Loss: 3822099.26171875, Actor Loss: -102639.20849609375
Episode 7755: Time: 0.3261547088623047, Total Reward: 333.2581522469441, Q Loss: 6112625.224609375, Actor Loss: -152956.03344726562
Episode 7756: Time: 0.6423773765563965, Total Reward: 667.262647068796, Q Loss: 12152998.6171875, Actor Loss: -301187.59716796875
Episode 7757: Time: 0.5452232360839844, Total Reward: 564.8972260397352, Q Loss: 8742744.59375, Actor Loss: -255238.42431640625
Episode 7758: Time: 0.343430757522583, Total Reward: 350.84007052617767, Q Loss: 7245954.58984375, Actor Loss: -161642.890625
Episode 7759: Time: 0.0972146987915039, Total Reward: 91.51979460099852, Q Loss: 1807051.59375, Actor Loss: -43002.855712890625
Episode 7760: Time: 0.2732686996459961, Total Reward: 277.34141276770424, Q Loss: 5001757.49609375, Actor Loss: -127995.6904296875
Episode 7761: Time: 0.14930057525634766, Total Reward: 147.1643368858093, Q Loss: 1975909.83203125, Actor Loss: -74083.560546875
Episode 7762: Time: 0.25541138648986816, Total Reward: 259.72728621465103, Q Loss: 5151175.4921875, Actor Loss: -121621.12719726562

Episode 7763: Time: 0.23770594596862793, Total Reward: 240.5379713777098, Q Loss: 4064853.2578125, Actor Loss: -111224.95263671875
Episode 7764: Time: 0.11459755897521973, Total Reward: 109.35039895039928, Q Loss: 2203484.29296875, Actor Loss: -51713.0244140625
Episode 7765: Time: 0.2990400791168213, Total Reward: 305.8704169372238, Q Loss: 5313608.0703125, Actor Loss: -142265.298828125
Episode 7766: Time: 0.4045374393463135, Total Reward: 414.032333386564, Q Loss: 7495684.79296875, Actor Loss: -191475.89965820312
Episode 7767: Time: 0.4748835563659668, Total Reward: 491.3902492256078, Q Loss: 9863953.04296875, Actor Loss: -225779.28393554688
Episode 7768: Time: 0.26403045654296875, Total Reward: 267.465319927964, Q Loss: 4877849.359375, Actor Loss: -126725.50439453125
Episode 7769: Time: 0.14933371543884277, Total Reward: 146.50885211736642, Q Loss: 3165526.4609375, Actor Loss: -73122.24926757812
Episode 7770: Time: 0.7724812030792236, Total Reward: 808.334755992414, Q Loss: 14288882.046875, Actor Loss: -363087.5859375
Episode 7771: Time: 0.17560815811157227, Total Reward: 174.9754632429223, Q Loss: 3002235.90625, Actor Loss: -80003.806640625
Episode 7772: Time: 0.18465495109558105, Total Reward: 182.33856151015462, Q Loss: 3075996.3984375, Actor Loss: -88573.63745117188
Episode 7773: Time: 0.3693392276763916, Total Reward: 379.8850878934341, Q Loss: 5951928.6796875, Actor Loss: -178464.61962890625
Episode 7774: Time: 0.25444889068603516, Total Reward: 257.7515648969147, Q Loss: 4409460.06640625, Actor Loss: -122431.26831054688
Episode 7775: Time: 0.41281795501708984, Total Reward: 426.7091930393296, Q Loss: 8025674.14453125, Actor Loss: -196444.62646484375
Episode 7776: Time: 0.19361233711242676, Total Reward: 193.22587018505848, Q Loss: 3960475.93359375, Actor Loss: -91989.7666015625
Episode 7777: Time: 0.07109594345092773, Total Reward: 63.223445393015886, Q Loss: 1179489.51171875, Actor Loss: -32105.4921875
Episode 7778: Time: 0.1500391960144043, Total Reward: 146.97983631727354, Q Loss: 3072619.6484375, Actor Loss: -69588.89135742188
Episode 7779: Time: 0.3084864616394043, Total Reward: 314.7678479506828, Q Loss: 5167914.90625, Actor Loss: -147255.79443359375
Episode 7780: Time: 0.07960772514343262, Total Reward: 72.38063938634397, Q Loss: 1327083.0078125, Actor Loss: -39533.657958984375
Episode 7781: Time: 0.1767134666442871, Total Reward: 175.15487183711144, Q Loss: 2613474.03125, Actor Loss: -85302.43115234375
Episode 7782: Time: 0.5618767738342285, Total Reward: 584.8213225198759, Q Loss: 9107860.423828125, Actor Loss: -267515.3703613281
Episode 7783: Time: 0.44847583770751953, Total Reward: 462.92513253882333, Q Loss: 6701876.671875, Actor Loss: -212481.46484375
Episode 7784: Time: 0.31657981872558594, Total Reward: 323.09207389989393, Q Loss: 6739659.19921875, Actor Loss: -150459.26782226562
Episode 7785: Time: 0.16728901863098145, Total Reward: 164.73913792285722, Q Loss: 3818464.01953125, Actor Loss: -80937.556640625
Episode 7786: Time: 0.3428025245666504, Total Reward: 352.0846063311905, Q Loss: 6507611.59375, Actor Loss: -163895.6796875
Episode 7787: Time: 0.12824630737304688, Total Reward: 109.95368109645811, Q Loss: 1883769.140625, Actor Loss: -54551.992919921875
Episode 7788: Time: 0.09573483467102051, Total Reward: 82.14009776549834, Q Loss: 1499952.115234375, Actor Loss: -42534.44580078125
Episode 7789: Time: 0.14796948432922363, Total Reward: 138.05469796428534, Q Loss: 1870484.6796875, Actor Loss: -65758.51049804688
Episode 7790: Time: 1.092498779296875, Total Reward: 1124.5704758762836, Q Loss: 20183407.609375, Actor Loss: -509608.4072265625

Episode 7791: Time: 0.13422799110412598, Total Reward: 128.64565305969091, Q Loss: 2350714.2890625, Actor Loss: -63096.236572265625
Episode 7792: Time: 0.18804717063903809, Total Reward: 183.491094518208, Q Loss: 2936173.78125, Actor Loss: -89247.25537109375
Episode 7793: Time: 0.21449065208435059, Total Reward: 210.31570546415657, Q Loss: 4537186.2734375, Actor Loss: -101581.98168945312
Episode 7794: Time: 0.39325523376464844, Total Reward: 398.0194272355638, Q Loss: 7047722.51953125, Actor Loss: -184110.41625976562
Episode 7795: Time: 0.19658946990966797, Total Reward: 193.30299515466533, Q Loss: 3529869.72265625, Actor Loss: -93336.52099609375
Episode 7796: Time: 0.41055965423583984, Total Reward: 418.20431990945605, Q Loss: 6402334.818359375, Actor Loss: -191464.06201171875
Episode 7797: Time: 0.5701537132263184, Total Reward: 584.2502621642356, Q Loss: 11320123.3515625, Actor Loss: -273420.3630371094
Episode 7798: Time: 0.21372413635253906, Total Reward: 212.26765443626087, Q Loss: 3557029.734375, Actor Loss: -102593.54077148438
Episode 7799: Time: 0.32074713706970215, Total Reward: 322.96837954136396, Q Loss: 6489162.9765625, Actor Loss: -151637.79833984375
Validation Mean: 9353.576570832862, Validation Std: 0.3572304947144589
saving model
Episode 7800: Time: 0.44127702713012695, Total Reward: 435.1445308327162, Q Loss: 8880285.80859375, Actor Loss: -202586.5
Episode 7801: Time: 0.17908525466918945, Total Reward: 173.3933271246999, Q Loss: 3027171.34375, Actor Loss: -83624.99584960938
Episode 7802: Time: 0.34778547286987305, Total Reward: 349.4990105616205, Q Loss: 5515789.1953125, Actor Loss: -169212.45751953125
Episode 7803: Time: 0.22310853004455566, Total Reward: 219.4402609633381, Q Loss: 5066181.349609375, Actor Loss: -105689.76098632812
Episode 7804: Time: 0.25829195976257324, Total Reward: 256.6535456895445, Q Loss: 5054412.5078125, Actor Loss: -121235.14599609375
Episode 7805: Time: 0.33824729919433594, Total Reward: 341.36108032009787, Q Loss: 4868920.05859375, Actor Loss: -162691.5810546875
Episode 7806: Time: 0.2233731746673584, Total Reward: 220.60852291135433, Q Loss: 4145040.88671875, Actor Loss: -104895.90234375
Episode 7807: Time: 0.2497091293334961, Total Reward: 250.14839837174105, Q Loss: 5006142.18359375, Actor Loss: -116234.1982421875
Episode 7808: Time: 0.24071478843688965, Total Reward: 238.62650674159937, Q Loss: 3980600.1171875, Actor Loss: -113833.66259765625
Episode 7809: Time: 0.14234399795532227, Total Reward: 138.33868058022148, Q Loss: 2759788.6171875, Actor Loss: -66239.51293945312
Episode 7810: Time: 0.23155570030212402, Total Reward: 229.56146615954717, Q Loss: 4745387.294921875, Actor Loss: -106325.1513671875
Episode 7811: Time: 0.3953094482421875, Total Reward: 398.106625458468, Q Loss: 8756273.4609375, Actor Loss: -185086.59594726562
Episode 7812: Time: 0.27793097496032715, Total Reward: 278.1344706904518, Q Loss: 4709373.63671875, Actor Loss: -133555.37866210938
Episode 7813: Time: 0.23206853866577148, Total Reward: 228.58899251415636, Q Loss: 4171908.36328125, Actor Loss: -109039.2626953125
Episode 7814: Time: 0.2142949104309082, Total Reward: 212.02769093295723, Q Loss: 4156494.2421875, Actor Loss: -103714.73852539062
Episode 7815: Time: 0.727736234664917, Total Reward: 734.0850184381351, Q Loss: 12701776.640625, Actor Loss: -340252.1511230469
Episode 7816: Time: 0.2497873306274414, Total Reward: 237.93774243739583, Q Loss: 4364144.9140625, Actor Loss: -115209.31176757812
Episode 7817: Time: 0.2585868835449219, Total Reward: 239.49467638152603, Q Loss: 5234185.30078125, Actor Loss: -117167.27270507812

Episode 7818: Time: 0.3004631996154785, Total Reward: 295.56693473835816, Q Loss: 5068061.28125, Actor Loss: -145761.23291015625
Episode 7819: Time: 0.46718263626098633, Total Reward: 481.04925251802075, Q Loss: 9284983.4453125, Actor Loss: -224786.28076171875
Episode 7820: Time: 0.07050728797912598, Total Reward: 62.5823964321103, Q Loss: 2013755.484375, Actor Loss: -32373.5966796875
Episode 7821: Time: 0.11460351943969727, Total Reward: 109.96613415106401, Q Loss: 2050817.86328125, Actor Loss: -57301.353759765625
Episode 7822: Time: 0.3527688980102539, Total Reward: 359.6372590183705, Q Loss: 6811953.796875, Actor Loss: -166108.2939453125
Episode 7823: Time: 0.13227534294128418, Total Reward: 129.2472690311396, Q Loss: 2551714.7109375, Actor Loss: -65494.823486328125
Episode 7824: Time: 0.17624878883361816, Total Reward: 175.02970575689514, Q Loss: 3615111.400390625, Actor Loss: -84386.98193359375
Episode 7825: Time: 0.27301645278930664, Total Reward: 275.6160394921547, Q Loss: 7293673.00390625, Actor Loss: -129610.43383789062
Episode 7826: Time: 0.2646622657775879, Total Reward: 268.0528262028106, Q Loss: 5760873.71484375, Actor Loss: -126472.07763671875
Episode 7827: Time: 0.22917437553405762, Total Reward: 230.93311668936317, Q Loss: 4877150.87109375, Actor Loss: -112281.94604492188
Episode 7828: Time: 0.4131298065185547, Total Reward: 426.61151417793616, Q Loss: 7877260.28515625, Actor Loss: -199933.9296875
Episode 7829: Time: 0.29114532470703125, Total Reward: 295.32464987993126, Q Loss: 5138055.87109375, Actor Loss: -138019.3134765625
Episode 7830: Time: 0.10599184036254883, Total Reward: 100.54908804193964, Q Loss: 2145593.26171875, Actor Loss: -49578.986328125
Episode 7831: Time: 0.1771237850189209, Total Reward: 174.54729363329147, Q Loss: 3071181.46875, Actor Loss: -88734.36474609375
Episode 7832: Time: 0.08833098411560059, Total Reward: 82.04187777534601, Q Loss: 1786146.2734375, Actor Loss: -45020.439453125
Episode 7833: Time: 0.31687331199645996, Total Reward: 322.417297856835, Q Loss: 5873479.1796875, Actor Loss: -153421.56225585938
Episode 7834: Time: 0.2115786075592041, Total Reward: 211.6741809953395, Q Loss: 3135251.8515625, Actor Loss: -102978.029296875
Episode 7835: Time: 0.3883781433105469, Total Reward: 397.6404948455013, Q Loss: 7237666.25390625, Actor Loss: -190038.18188476562
Episode 7836: Time: 0.3350870609283447, Total Reward: 341.8546061982244, Q Loss: 7093923.1328125, Actor Loss: -160313.72143554688
Episode 7837: Time: 0.3168487548828125, Total Reward: 323.2327435463259, Q Loss: 6816042.16796875, Actor Loss: -154437.86938476562
Episode 7838: Time: 0.12346816062927246, Total Reward: 119.08939123266543, Q Loss: 2261661.84375, Actor Loss: -57189.26220703125
Episode 7839: Time: 0.1680150032043457, Total Reward: 165.51416342575405, Q Loss: 2426982.71875, Actor Loss: -80384.5927734375
Episode 7840: Time: 0.25601792335510254, Total Reward: 259.17514436478774, Q Loss: 4683530.84375, Actor Loss: -119893.16943359375
Episode 7841: Time: 0.16753411293029785, Total Reward: 166.34071589838837, Q Loss: 2884330.7109375, Actor Loss: -82767.9873046875
Episode 7842: Time: 0.22124361991882324, Total Reward: 220.67770991131994, Q Loss: 4312681.83203125, Actor Loss: -107701.24365234375
Episode 7843: Time: 0.1764845848083496, Total Reward: 174.54270232118097, Q Loss: 2353828.3671875, Actor Loss: -86627.13330078125
Episode 7844: Time: 0.42247581481933594, Total Reward: 435.86007800689, Q Loss: 8091328.7578125, Actor Loss: -208869.64111328125
Episode 7845: Time: 0.3517632484436035, Total Reward: 361.3989600991919, Q Loss: 6297735.54296875, Actor Loss: -170426.52490234375

Episode 7846: Time: 0.08808684349060059, Total Reward: 82.16888218960788, Q Loss: 1267483.625, Actor Loss: -43854.743896484375
Episode 7847: Time: 0.39583492279052734, Total Reward: 405.80766321581024, Q Loss: 7192115.48828125, Actor Loss: -194903.466796875
Episode 7848: Time: 0.676868200302124, Total Reward: 704.463731785861, Q Loss: 14072815.7578125, Actor Loss: -332274.2578125
Episode 7849: Time: 0.14211249351501465, Total Reward: 137.2211783549274, Q Loss: 2853333.2578125, Actor Loss: -66235.08154296875
Episode 7850: Time: 0.20282936096191406, Total Reward: 201.29530692605599, Q Loss: 4417612.96875, Actor Loss: -100256.41674804688
Episode 7851: Time: 0.29053783416748047, Total Reward: 295.6432563363556, Q Loss: 6340918.15625, Actor Loss: -141028.5986328125
Episode 7852: Time: 0.22078871726989746, Total Reward: 221.8723495010414, Q Loss: 4077582.86328125, Actor Loss: -108157.11010742188
Episode 7853: Time: 0.22048640251159668, Total Reward: 221.36510706985754, Q Loss: 4465304.515625, Actor Loss: -107250.91943359375
Episode 7854: Time: 0.35184168815612793, Total Reward: 361.10063231362335, Q Loss: 6585783.671875, Actor Loss: -172669.41235351562
Episode 7855: Time: 0.16698074340820312, Total Reward: 165.68636990560574, Q Loss: 3799742.640625, Actor Loss: -82090.37158203125
Episode 7856: Time: 0.29860448837280273, Total Reward: 304.1605284517507, Q Loss: 6219183.609375, Actor Loss: -149232.96875
Episode 7857: Time: 0.5191428661346436, Total Reward: 539.4039579082229, Q Loss: 9999282.37890625, Actor Loss: -253682.94018554688
Episode 7858: Time: 0.20303797721862793, Total Reward: 202.1728074300111, Q Loss: 4060940.0234375, Actor Loss: -98786.64379882812
Episode 7859: Time: 0.2992708683013916, Total Reward: 304.8584103273504, Q Loss: 5388690.87890625, Actor Loss: -147758.39819335938
Episode 7860: Time: 0.33455467224121094, Total Reward: 342.3792250262091, Q Loss: 6671895.28125, Actor Loss: -161980.26049804688
Episode 7861: Time: 0.28174352645874023, Total Reward: 287.13283175483497, Q Loss: 5175472.5546875, Actor Loss: -141349.595703125
Episode 7862: Time: 0.4658317565917969, Total Reward: 482.2542359307378, Q Loss: 8315903.841796875, Actor Loss: -229219.42041015625
Episode 7863: Time: 0.16749811172485352, Total Reward: 165.30726740975467, Q Loss: 3956700.9375, Actor Loss: -84323.10717773438
Episode 7864: Time: 0.1326124668121338, Total Reward: 128.26642282293056, Q Loss: 2849718.67578125, Actor Loss: -66007.24291992188
Episode 7865: Time: 0.32555270195007324, Total Reward: 332.43166346619273, Q Loss: 5863309.73046875, Actor Loss: -160396.53637695312
Episode 7866: Time: 0.46622443199157715, Total Reward: 481.37018061853763, Q Loss: 9241767.3515625, Actor Loss: -227953.82958984375
Episode 7867: Time: 0.13230013847351074, Total Reward: 129.02947405293784, Q Loss: 4310472.0, Actor Loss: -64638.262939453125
Episode 7868: Time: 0.1331946849822998, Total Reward: 128.4890569393856, Q Loss: 2925773.34375, Actor Loss: -62197.262451171875
Episode 7869: Time: 0.23813843727111816, Total Reward: 240.06357557080324, Q Loss: 4400128.91015625, Actor Loss: -119535.69384765625
Episode 7870: Time: 0.14521002769470215, Total Reward: 118.52498631133291, Q Loss: 2171905.1640625, Actor Loss: -63871.6767578125
Episode 7871: Time: 0.14107322692871094, Total Reward: 138.06605921013917, Q Loss: 2265853.0, Actor Loss: -72231.36059570312
Episode 7872: Time: 0.28157949447631836, Total Reward: 286.933572210188, Q Loss: 5487984.06640625, Actor Loss: -140305.8779296875
Episode 7873: Time: 0.2199099063873291, Total Reward: 222.20186587226988, Q Loss: 3331456.51953125, Actor Loss: -107364.19750976562

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Episode 7874: Time: 0.15843510627746582, Total Reward: 155.1984238500085, Q
Loss: 3493992.50390625, Actor Loss: -77610.39282226562
Episode 7875: Time: 0.4493277072906494, Total Reward: 461.4496779117381, Q L
oss: 10069522.0703125, Actor Loss: -218408.0791015625
Episode 7876: Time: 0.19373726844787598, Total Reward: 193.85900304132284, Q
Loss: 3676966.90625, Actor Loss: -96305.439453125
Episode 7877: Time: 0.28176021575927734, Total Reward: 287.37457433035866, Q
Loss: 5367766.6328125, Actor Loss: -142397.328125
Episode 7878: Time: 0.13224220275878906, Total Reward: 128.8489933122134, Q
Loss: 3088712.125, Actor Loss: -66113.65551757812
Episode 7879: Time: 0.2908291816711426, Total Reward: 295.3766851417356, Q L
oss: 5696460.0859375, Actor Loss: -140963.31982421875
Episode 7880: Time: 0.22932100296020508, Total Reward: 230.2973721368785, Q
Loss: 4789138.0390625, Actor Loss: -113634.89086914062
Episode 7881: Time: 0.47484326362609863, Total Reward: 492.37814065965256, Q
Loss: 9485452.640625, Actor Loss: -231042.75366210938
Episode 7882: Time: 0.3082153797149658, Total Reward: 314.8609977976087, Q L
oss: 5042938.29296875, Actor Loss: -155651.57885742188
Episode 7883: Time: 0.3168368339538574, Total Reward: 324.03359025555363, Q
Loss: 6064114.5, Actor Loss: -151859.03564453125
Episode 7884: Time: 0.13209962844848633, Total Reward: 127.93470908895044, Q
Loss: 2885101.9765625, Actor Loss: -66662.0771484375
Episode 7885: Time: 0.12361884117126465, Total Reward: 119.37807711575512, Q
Loss: 1692340.52734375, Actor Loss: -60830.765380859375
Episode 7886: Time: 0.27313828468322754, Total Reward: 276.05907798523776, Q
Loss: 5009443.60546875, Actor Loss: -135046.01293945312
Episode 7887: Time: 0.3349883556365967, Total Reward: 342.35254010653443, Q
Loss: 6701494.25, Actor Loss: -167922.90844726562
Episode 7888: Time: 0.38742995262145996, Total Reward: 398.064487062143, Q L
oss: 8088505.19921875, Actor Loss: -188988.21533203125
Episode 7889: Time: 0.36075758934020996, Total Reward: 369.5497737382017, Q
Loss: 7842348.265625, Actor Loss: -177553.39306640625
Episode 7890: Time: 0.17647814750671387, Total Reward: 173.32825335379852, Q
Loss: 2858906.796875, Actor Loss: -85826.80249023438
Episode 7891: Time: 0.44072842597961426, Total Reward: 454.1322135639317, Q
Loss: 10078476.70703125, Actor Loss: -222825.2939453125
Episode 7892: Time: 0.14121174812316895, Total Reward: 138.34613859900728, Q
Loss: 3084470.8203125, Actor Loss: -71848.29418945312
Episode 7893: Time: 0.2388613224029541, Total Reward: 239.7468635625109, Q L
oss: 5229815.84765625, Actor Loss: -116151.69116210938
Episode 7894: Time: 0.07977843284606934, Total Reward: 72.36827492978153, Q
Loss: 1873163.546875, Actor Loss: -40724.309326171875
Episode 7895: Time: 0.265209436416626, Total Reward: 267.00302522252537, Q L
oss: 5283645.9453125, Actor Loss: -128639.72778320312
Episode 7896: Time: 0.2301192283630371, Total Reward: 229.7360229786228, Q L
oss: 5033568.0625, Actor Loss: -113010.64038085938
Episode 7897: Time: 0.19418668746948242, Total Reward: 191.23774452095165, Q
Loss: 3438397.02734375, Actor Loss: -94605.45629882812
Episode 7898: Time: 0.08018851280212402, Total Reward: 72.02862902439645, Q
Loss: 1451019.1640625, Actor Loss: -40693.2060546875
Episode 7899: Time: 0.5202755928039551, Total Reward: 538.9861919966229, Q L
oss: 10910712.02734375, Actor Loss: -258887.36645507812
Validation Mean: 9353.383624457798, Validation Std: 0.3247872441425427
saving model
Episode 7900: Time: 0.5811879634857178, Total Reward: 584.4731535764686, Q L
oss: 11450773.91796875, Actor Loss: -278756.60400390625
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Episode 7901: Time: 0.13446855545043945, Total Reward: 127.84575267508541, Q Loss: 3428723.0625, Actor Loss: -67630.81323242188
Episode 7902: Time: 0.7207019329071045, Total Reward: 742.685153325898, Q Loss: 13770678.09375, Actor Loss: -359190.0793457031
Episode 7903: Time: 0.26684141159057617, Total Reward: 266.4621601687545, Q Loss: 6398159.79296875, Actor Loss: -131087.90112304688
Episode 7904: Time: 0.43442416191101074, Total Reward: 444.0844512914963, Q Loss: 8565723.59765625, Actor Loss: -216791.25708007812
Episode 7905: Time: 0.20424628257751465, Total Reward: 202.22227692725113, Q Loss: 3278244.4140625, Actor Loss: -103032.64282226562
Episode 7906: Time: 0.5214760303497314, Total Reward: 538.3172654885119, Q Loss: 11147460.86328125, Actor Loss: -255203.322265625
Episode 7907: Time: 0.22096538543701172, Total Reward: 220.20265944841583, Q Loss: 4645291.61328125, Actor Loss: -108744.40185546875
Episode 7908: Time: 0.1679387092590332, Total Reward: 166.39427228974023, Q Loss: 3641345.546875, Actor Loss: -85089.84814453125
Episode 7909: Time: 0.38028740882873535, Total Reward: 388.5067782182951, Q Loss: 7162532.4375, Actor Loss: -186938.85424804688
Episode 7910: Time: 0.28450846672058105, Total Reward: 286.8057529018217, Q Loss: 6244927.2421875, Actor Loss: -141500.041015625
Episode 7911: Time: 0.37168312072753906, Total Reward: 378.0127966064905, Q Loss: 8129737.958984375, Actor Loss: -184642.6474609375
Episode 7912: Time: 0.15079522132873535, Total Reward: 146.99041138634558, Q Loss: 3670216.08984375, Actor Loss: -76265.04467773438
Episode 7913: Time: 0.3185081481933594, Total Reward: 323.9213450520585, Q Loss: 7034252.6328125, Actor Loss: -161097.1123046875
Episode 7914: Time: 0.2037522792816162, Total Reward: 202.06055320208165, Q Loss: 3371324.16015625, Actor Loss: -101738.29736328125
Episode 7915: Time: 0.5737581253051758, Total Reward: 594.7983768111766, Q Loss: 11700323.01171875, Actor Loss: -286534.6696777344
Episode 7916: Time: 0.2920076847076416, Total Reward: 295.93868228479425, Q Loss: 6473892.88671875, Actor Loss: -143144.96264648438
Episode 7917: Time: 0.6766886711120605, Total Reward: 697.1774003365633, Q Loss: 12284647.984375, Actor Loss: -332956.24462890625
Episode 7918: Time: 0.4167799949645996, Total Reward: 426.1904110850603, Q Loss: 9124385.87109375, Actor Loss: -207408.17163085938
Episode 7919: Time: 0.3192439079284668, Total Reward: 324.0189488584906, Q Loss: 7549306.04296875, Actor Loss: -155587.60180664062
Episode 7920: Time: 0.1418895721435547, Total Reward: 137.85290289202595, Q Loss: 2079417.21875, Actor Loss: -70124.115234375
Episode 7921: Time: 0.2747931480407715, Total Reward: 277.2698449559922, Q Loss: 5164211.02734375, Actor Loss: -139373.158203125
Episode 7922: Time: 0.15044236183166504, Total Reward: 146.67029405608022, Q Loss: 2185309.3046875, Actor Loss: -76854.775390625
Episode 7923: Time: 0.13351130485534668, Total Reward: 128.37419517684347, Q Loss: 2264673.921875, Actor Loss: -65968.19311523438
Episode 7924: Time: 0.6989357471466064, Total Reward: 723.5530888472334, Q Loss: 13029681.66015625, Actor Loss: -348412.6359863281
Episode 7925: Time: 0.7873635292053223, Total Reward: 818.2721971408066, Q Loss: 17104209.53125, Actor Loss: -397508.5231933594
Episode 7926: Time: 0.24786734580993652, Total Reward: 249.97565705643262, Q Loss: 4064346.15625, Actor Loss: -126476.86840820312
Episode 7927: Time: 0.1678311824798584, Total Reward: 165.9304070679734, Q Loss: 3804199.7265625, Actor Loss: -84078.79272460938
Episode 7928: Time: 0.14183998107910156, Total Reward: 137.97493597786027, Q Loss: 2463680.4921875, Actor Loss: -68129.96606445312

Episode 7929: Time: 0.2996406555175781, Total Reward: 305.23432802061103, Q Loss: 6571075.48828125, Actor Loss: -151478.70166015625
Episode 7930: Time: 0.2826206684112549, Total Reward: 287.4925487056229, Q Loss: 7299570.2734375, Actor Loss: -140419.49145507812
Episode 7931: Time: 0.14995455741882324, Total Reward: 147.33365413686488, Q Loss: 2902185.44140625, Actor Loss: -75806.8076171875
Episode 7932: Time: 0.45079469680786133, Total Reward: 461.2847660653243, Q Loss: 9327340.7890625, Actor Loss: -230566.40771484375
Episode 7933: Time: 0.3361392021179199, Total Reward: 341.5076060881366, Q Loss: 8221408.6484375, Actor Loss: -172388.0322265625
Episode 7934: Time: 0.08857178688049316, Total Reward: 81.75212692096844, Q Loss: 2093172.26171875, Actor Loss: -43262.255126953125
Episode 7935: Time: 0.3976454734802246, Total Reward: 407.17900032053006, Q Loss: 9118737.53515625, Actor Loss: -201894.70629882812
Episode 7936: Time: 0.3182237148284912, Total Reward: 323.46520355579514, Q Loss: 7417341.078125, Actor Loss: -158143.34643554688
Episode 7937: Time: 0.4085240364074707, Total Reward: 417.41902500828695, Q Loss: 8499041.11328125, Actor Loss: -200931.61889648438
Episode 7938: Time: 0.18882322311401367, Total Reward: 184.6158923178835, Q Loss: 4231657.140625, Actor Loss: -93509.32348632812
Episode 7939: Time: 0.10686016082763672, Total Reward: 100.80498563434885, Q Loss: 1562795.62890625, Actor Loss: -54680.7646484375
Episode 7940: Time: 0.22137713432312012, Total Reward: 220.71586151308318, Q Loss: 5311671.78125, Actor Loss: -112703.57641601562
Episode 7941: Time: 0.3715236186981201, Total Reward: 377.3964218780535, Q Loss: 8419672.7109375, Actor Loss: -188901.86474609375
Episode 7942: Time: 0.1424398422241211, Total Reward: 137.71216971275555, Q Loss: 2503358.515625, Actor Loss: -71917.62426757812
Episode 7943: Time: 0.06273365020751953, Total Reward: 53.36409015879566, Q Loss: 1738292.75, Actor Loss: -32410.78857421875
Episode 7944: Time: 0.15014386177062988, Total Reward: 146.973507181227, Q Loss: 3066984.83203125, Actor Loss: -75559.40234375
Episode 7945: Time: 0.41492533683776855, Total Reward: 426.900139900978, Q Loss: 9020801.703125, Actor Loss: -208930.8173828125
Episode 7946: Time: 0.2214341163635254, Total Reward: 222.07162735512722, Q Loss: 3858455.62890625, Actor Loss: -112125.94970703125
Episode 7947: Time: 0.5026867389678955, Total Reward: 520.2752480610658, Q Loss: 9049299.2265625, Actor Loss: -259784.830078125
Episode 7948: Time: 0.20320653915405273, Total Reward: 202.50602323782988, Q Loss: 4272480.1015625, Actor Loss: -104786.97265625
Episode 7949: Time: 0.11481904983520508, Total Reward: 110.15084889560715, Q Loss: 2314434.859375, Actor Loss: -60212.42138671875
Episode 7950: Time: 0.21224641799926758, Total Reward: 211.3684508412053, Q Loss: 6232806.84375, Actor Loss: -109992.22387695312
Episode 7951: Time: 0.3271052837371826, Total Reward: 332.49859554194745, Q Loss: 6180726.91015625, Actor Loss: -168841.87890625
Episode 7952: Time: 0.12364554405212402, Total Reward: 117.92722242652547, Q Loss: 1785010.48046875, Actor Loss: -62342.505615234375
Episode 7953: Time: 0.24845552444458008, Total Reward: 249.6606507202112, Q Loss: 6593896.41796875, Actor Loss: -127647.24951171875
Episode 7954: Time: 0.08879327774047852, Total Reward: 82.07908071409065, Q Loss: 2480068.1875, Actor Loss: -46436.966796875
Episode 7955: Time: 0.1681504249572754, Total Reward: 164.40233923403898, Q Loss: 4035984.41796875, Actor Loss: -87375.19580078125
Episode 7956: Time: 0.5201468467712402, Total Reward: 537.705956904837, Q Loss: 11751350.234375, Actor Loss: -275534.81201171875

Episode 7957: Time: 0.23829126358032227, Total Reward: 240.16848061881382, Q Loss: 5186014.81640625, Actor Loss: -123213.48559570312
Episode 7958: Time: 0.3357694149017334, Total Reward: 342.94431633473425, Q Loss: 7392284.0234375, Actor Loss: -172014.85717773438
Episode 7959: Time: 0.24773383140563965, Total Reward: 249.07092612132274, Q Loss: 4686967.79296875, Actor Loss: -127580.63452148438
Episode 7960: Time: 0.34387922286987305, Total Reward: 351.3574735121959, Q Loss: 7542496.48046875, Actor Loss: -175920.56005859375
Episode 7961: Time: 0.1148080825805664, Total Reward: 110.32738575106116, Q Loss: 2576151.0625, Actor Loss: -57370.38720703125
Episode 7962: Time: 0.11502218246459961, Total Reward: 108.89576650306968, Q Loss: 3253699.0234375, Actor Loss: -58365.738525390625
Episode 7963: Time: 0.44185495376586914, Total Reward: 454.9248044500501, Q Loss: 10515361.69140625, Actor Loss: -226286.1591796875
Episode 7964: Time: 0.29111409187316895, Total Reward: 296.2261233996249, Q Loss: 6237599.45703125, Actor Loss: -150169.318359375
Episode 7965: Time: 0.21225619316101074, Total Reward: 211.9992964221034, Q Loss: 3574718.6953125, Actor Loss: -107689.130859375
Episode 7966: Time: 0.5474038124084473, Total Reward: 566.6347817112332, Q Loss: 12195055.12109375, Actor Loss: -281677.83984375
Episode 7967: Time: 0.1854572296142578, Total Reward: 182.1663710135291, Q Loss: 4881718.265625, Actor Loss: -95782.04638671875
Episode 7968: Time: 0.1594247817993164, Total Reward: 155.3440578697556, Q Loss: 3609558.9453125, Actor Loss: -81816.89428710938
Episode 7969: Time: 0.39714813232421875, Total Reward: 405.8360183763152, Q Loss: 8249117.2734375, Actor Loss: -205454.78051757812
Episode 7970: Time: 0.08860325813293457, Total Reward: 82.09123372835383, Q Loss: 1839415.984375, Actor Loss: -46745.9765625
Episode 7971: Time: 0.17703461647033691, Total Reward: 174.59244625971345, Q Loss: 4289289.5078125, Actor Loss: -90646.7744140625
Episode 7972: Time: 0.14999961853027344, Total Reward: 146.40191534326843, Q Loss: 3575809.3828125, Actor Loss: -75988.6279296875
Episode 7973: Time: 0.3358309268951416, Total Reward: 342.5721147219429, Q Loss: 7004311.90234375, Actor Loss: -167438.44995117188
Episode 7974: Time: 0.26439571380615234, Total Reward: 268.0371187130207, Q Loss: 6077573.46484375, Actor Loss: -138717.92065429688
Episode 7975: Time: 0.264819860458374, Total Reward: 268.0903170263701, Q Loss: 5957652.62890625, Actor Loss: -138020.20336914062
Episode 7976: Time: 0.14127039909362793, Total Reward: 138.2873439693805, Q Loss: 2902809.09765625, Actor Loss: -76280.80029296875
Episode 7977: Time: 0.16849470138549805, Total Reward: 166.4084155224959, Q Loss: 3363272.0859375, Actor Loss: -84346.82177734375
Episode 7978: Time: 0.3263058662414551, Total Reward: 332.3182806521399, Q Loss: 6565467.65234375, Actor Loss: -169018.66064453125
Episode 7979: Time: 0.23793601989746094, Total Reward: 238.21227054532451, Q Loss: 5498927.109375, Actor Loss: -122240.96069335938
Episode 7980: Time: 0.4666876792907715, Total Reward: 479.660271352135, Q Loss: 10038110.6796875, Actor Loss: -241848.16918945312
Episode 7981: Time: 0.20284056663513184, Total Reward: 202.5262736796518, Q Loss: 4197283.6328125, Actor Loss: -102221.40380859375
Episode 7982: Time: 0.3896212577819824, Total Reward: 394.8099472540113, Q Loss: 7945590.66015625, Actor Loss: -201251.97387695312
Episode 7983: Time: 0.14118289947509766, Total Reward: 137.7244426186905, Q Loss: 3602930.796875, Actor Loss: -74787.16186523438
Episode 7984: Time: 0.2210378646850586, Total Reward: 220.25805881003473, Q Loss: 4176238.421875, Actor Loss: -116100.85400390625

Episode 7985: Time: 0.5022597312927246, Total Reward: 519.7463694084115, Q Loss: 11503087.625, Actor Loss: -261469.330078125
Episode 7986: Time: 0.4226865768432617, Total Reward: 434.5343694893106, Q Loss: 9141769.70703125, Actor Loss: -218829.40698242188
Episode 7987: Time: 0.16765975952148438, Total Reward: 165.50992513919755, Q Loss: 4462527.62890625, Actor Loss: -87113.37841796875
Episode 7988: Time: 0.17666983604431152, Total Reward: 175.16699295530717, Q Loss: 4316185.265625, Actor Loss: -90560.9111328125
Episode 7989: Time: 0.14092206954956055, Total Reward: 137.35397990842296, Q Loss: 2229643.140625, Actor Loss: -73353.01147460938
Episode 7990: Time: 0.15912365913391113, Total Reward: 156.83823791277652, Q Loss: 2398238.21484375, Actor Loss: -81563.7666015625
Episode 7991: Time: 0.13214492797851562, Total Reward: 129.30755779792779, Q Loss: 2259838.63671875, Actor Loss: -67848.34765625
Episode 7992: Time: 0.19369721412658691, Total Reward: 193.52028224972838, Q Loss: 4378101.3984375, Actor Loss: -99753.37133789062
Episode 7993: Time: 0.22940659523010254, Total Reward: 230.2768903917648, Q Loss: 5363078.3671875, Actor Loss: -121082.18627929688
Episode 7994: Time: 0.24707913398742676, Total Reward: 247.38075293483718, Q Loss: 5574465.6796875, Actor Loss: -125684.07470703125
Episode 7995: Time: 0.3080124855041504, Total Reward: 314.82217832593324, Q Loss: 7387372.21875, Actor Loss: -163447.36547851562
Episode 7996: Time: 0.16739773750305176, Total Reward: 165.5021902990604, Q Loss: 3959218.7109375, Actor Loss: -85159.7724609375
Episode 7997: Time: 0.3609476089477539, Total Reward: 370.33333786885913, Q Loss: 8620511.2421875, Actor Loss: -185594.55346679688
Episode 7998: Time: 0.1498889923095703, Total Reward: 147.12682773501945, Q Loss: 2836362.51953125, Actor Loss: -80893.52270507812
Episode 7999: Time: 0.13293671607971191, Total Reward: 128.4443974431599, Q Loss: 3872047.6484375, Actor Loss: -68584.51513671875
Validation Mean: 9353.163878356023, Validation Std: 0.2992948991222425
saving model
Episode 8000: Time: 0.30167150497436523, Total Reward: 304.85650496509857, Q Loss: 5960261.03125, Actor Loss: -156755.484375
Episode 8001: Time: 0.19404840469360352, Total Reward: 194.29896138693206, Q Loss: 4561063.8203125, Actor Loss: -100413.37231445312
Episode 8002: Time: 0.32757091522216797, Total Reward: 331.3537549697401, Q Loss: 6114991.953125, Actor Loss: -173174.09545898438
Episode 8003: Time: 0.11487698554992676, Total Reward: 109.74744699670384, Q Loss: 2507742.30078125, Actor Loss: -57687.957275390625
Episode 8004: Time: 0.4235727787017822, Total Reward: 436.5062820787805, Q Loss: 8850355.37109375, Actor Loss: -216904.255859375
Episode 8005: Time: 0.38718676567077637, Total Reward: 398.0236499311668, Q Loss: 9356489.15625, Actor Loss: -203797.66137695312
Episode 8006: Time: 0.2818727493286133, Total Reward: 285.7209040972747, Q Loss: 5756577.1875, Actor Loss: -146430.99194335938
Episode 8007: Time: 0.23789024353027344, Total Reward: 239.75070562492783, Q Loss: 4656848.08984375, Actor Loss: -123754.5693359375
Episode 8008: Time: 0.14058160781860352, Total Reward: 137.59580721215838, Q Loss: 3350433.375, Actor Loss: -72190.14379882812
Episode 8009: Time: 0.49228525161743164, Total Reward: 510.12632524405825, Q Loss: 12442254.34765625, Actor Loss: -260369.58129882812
Episode 8010: Time: 0.6353950500488281, Total Reward: 655.8640760567675, Q Loss: 14983809.41015625, Actor Loss: -331876.4362792969
Episode 8011: Time: 0.17651820182800293, Total Reward: 174.22167194470737, Q Loss: 4241031.28125, Actor Loss: -92006.93969726562

Episode 8012: Time: 0.3698086738586426, Total Reward: 380.56309670040315, Q Loss: 8113338.26953125, Actor Loss: -190449.88159179688
Episode 8013: Time: 0.0969383716583252, Total Reward: 91.05662876178835, Q Loss: 1653535.4921875, Actor Loss: -50589.83056640625
Episode 8014: Time: 0.2203507423400879, Total Reward: 220.80572791850454, Q Loss: 4433360.40625, Actor Loss: -116553.951171875
Episode 8015: Time: 0.3344705104827881, Total Reward: 341.9104375240898, Q Loss: 7759841.26171875, Actor Loss: -174718.43603515625
Episode 8016: Time: 0.20286941528320312, Total Reward: 200.60816879941916, Q Loss: 4915915.9375, Actor Loss: -107130.28271484375
Episode 8017: Time: 0.23789381980895996, Total Reward: 239.0585097406312, Q Loss: 5914064.5546875, Actor Loss: -122685.92065429688
Episode 8018: Time: 0.20286083221435547, Total Reward: 202.0448759927441, Q Loss: 4971916.77734375, Actor Loss: -107016.08032226562
Episode 8019: Time: 0.18516850471496582, Total Reward: 184.45555156342405, Q Loss: 4246112.40234375, Actor Loss: -96806.74877929688
Episode 8020: Time: 0.8460321426391602, Total Reward: 881.2876808107997, Q Loss: 19010073.76953125, Actor Loss: -444044.4255371094
Episode 8021: Time: 0.2028336524963379, Total Reward: 202.4605068098523, Q Loss: 4165906.2578125, Actor Loss: -104159.0283203125
Episode 8022: Time: 0.25553250312805176, Total Reward: 259.3773218355857, Q Loss: 5067277.3359375, Actor Loss: -131599.62719726562
Episode 8023: Time: 0.2822601795196533, Total Reward: 287.6210471846581, Q Loss: 7255282.421875, Actor Loss: -148557.22778320312
Episode 8024: Time: 0.3518366813659668, Total Reward: 361.1361819356795, Q Loss: 9178152.85546875, Actor Loss: -180759.22314453125
Episode 8025: Time: 0.2644529342651367, Total Reward: 264.66992755880943, Q Loss: 5319230.6484375, Actor Loss: -136529.46313476562
Episode 8026: Time: 0.22911286354064941, Total Reward: 229.23987328575427, Q Loss: 5337956.28125, Actor Loss: -121818.8330078125
Episode 8027: Time: 0.5042762756347656, Total Reward: 519.2121867553885, Q Loss: 10011752.431640625, Actor Loss: -263534.9580078125
Episode 8028: Time: 0.09705924987792969, Total Reward: 91.36627682831414, Q Loss: 2175115.84765625, Actor Loss: -51544.234375
Episode 8029: Time: 0.28246045112609863, Total Reward: 285.3222428111224, Q Loss: 6335935.96875, Actor Loss: -149688.109375
Episode 8030: Time: 0.35216856002807617, Total Reward: 358.81574503799817, Q Loss: 8582272.265625, Actor Loss: -185957.89013671875
Episode 8031: Time: 0.11440849304199219, Total Reward: 109.56801553440181, Q Loss: 1770325.29296875, Actor Loss: -61940.7802734375
Episode 8032: Time: 0.4042508602142334, Total Reward: 416.8303811898045, Q Loss: 9949830.046875, Actor Loss: -215124.89379882812
Episode 8033: Time: 0.1848921775817871, Total Reward: 184.33314136390393, Q Loss: 4184516.78515625, Actor Loss: -96371.47729492188
Episode 8034: Time: 0.5108010768890381, Total Reward: 528.9875145992266, Q Loss: 11058378.30859375, Actor Loss: -267876.60400390625
Episode 8035: Time: 0.3538081645965576, Total Reward: 359.59837657152605, Q Loss: 8749404.6328125, Actor Loss: -182119.59985351562
Episode 8036: Time: 0.25670814514160156, Total Reward: 257.1349234627502, Q Loss: 5869031.1640625, Actor Loss: -133577.32568359375
Episode 8037: Time: 0.3609926700592041, Total Reward: 371.3871861927285, Q Loss: 7602419.19921875, Actor Loss: -192979.83056640625
Episode 8038: Time: 0.08846187591552734, Total Reward: 81.896551381501, Q Loss: 2282111.71484375, Actor Loss: -46593.88623046875
Episode 8039: Time: 0.12351465225219727, Total Reward: 119.33686861526847, Q Loss: 2720315.296875, Actor Loss: -66767.8125

Episode 8040: Time: 0.35974907875061035, Total Reward: 369.26805913277946, Q Loss: 7336922.07421875, Actor Loss: -192764.7431640625
Episode 8041: Time: 0.22027277946472168, Total Reward: 219.7756789941004, Q Loss: 5855486.69140625, Actor Loss: -120175.99560546875
Episode 8042: Time: 0.1848125457763672, Total Reward: 183.75614677144517, Q Loss: 4256960.3203125, Actor Loss: -98914.30102539062
Episode 8043: Time: 0.22907233238220215, Total Reward: 231.29586514166638, Q Loss: 5571891.46484375, Actor Loss: -120312.17163085938
Episode 8044: Time: 0.19335269927978516, Total Reward: 194.15273031811796, Q Loss: 3236254.19140625, Actor Loss: -101582.83129882812
Episode 8045: Time: 0.49286937713623047, Total Reward: 510.0115808675828, Q Loss: 11001657.99609375, Actor Loss: -263184.14111328125
Episode 8046: Time: 0.43988895416259766, Total Reward: 455.06987052233404, Q Loss: 9282358.7890625, Actor Loss: -236261.9853515625
Episode 8047: Time: 0.4307377338409424, Total Reward: 445.4627511133031, Q Loss: 9485219.1640625, Actor Loss: -229931.05517578125
Episode 8048: Time: 0.5098381042480469, Total Reward: 530.1081750209034, Q Loss: 11829236.703125, Actor Loss: -272221.3386230469
Episode 8049: Time: 0.24310684204101562, Total Reward: 239.98235380145925, Q Loss: 4859936.03515625, Actor Loss: -128475.7490234375
Episode 8050: Time: 0.21255922317504883, Total Reward: 212.18383465153497, Q Loss: 4708758.78125, Actor Loss: -113149.51513671875
Episode 8051: Time: 0.8371405601501465, Total Reward: 870.9168467008768, Q Loss: 16263278.22265625, Actor Loss: -443235.5656738281
Episode 8052: Time: 0.3612802028656006, Total Reward: 370.2175620483392, Q Loss: 8120788.44921875, Actor Loss: -189368.32958984375
Episode 8053: Time: 0.48412632942199707, Total Reward: 498.15674081748506, Q Loss: 10011629.3828125, Actor Loss: -259796.21069335938
Episode 8054: Time: 0.41326308250427246, Total Reward: 422.9160739153557, Q Loss: 11668033.80859375, Actor Loss: -223135.8662109375
Episode 8055: Time: 0.2733321189880371, Total Reward: 277.1507901236292, Q Loss: 5987229.7734375, Actor Loss: -145221.44580078125
Episode 8056: Time: 0.1581885814666748, Total Reward: 156.52938969069655, Q Loss: 3951775.9296875, Actor Loss: -86209.61572265625
Episode 8057: Time: 0.281649112701416, Total Reward: 286.40351729517334, Q Loss: 7290329.2578125, Actor Loss: -151582.46508789062
Episode 8058: Time: 0.3102450370788574, Total Reward: 314.0708439160172, Q Loss: 7824093.7265625, Actor Loss: -164514.25903320312
Episode 8059: Time: 0.3529801368713379, Total Reward: 361.4175659825533, Q Loss: 8566316.921875, Actor Loss: -184994.5029296875
Episode 8060: Time: 0.37801551818847656, Total Reward: 388.3807231038682, Q Loss: 10306213.21875, Actor Loss: -207887.29418945312
Episode 8061: Time: 0.4305148124694824, Total Reward: 445.2157406496132, Q Loss: 10263308.4765625, Actor Loss: -232643.76928710938
Episode 8062: Time: 0.649986982345581, Total Reward: 678.7555867728713, Q Loss: 15618274.421875, Actor Loss: -348757.8640136719
Episode 8063: Time: 0.18467974662780762, Total Reward: 182.7799371760719, Q Loss: 4684626.3671875, Actor Loss: -101730.93017578125
Episode 8064: Time: 0.08858537673950195, Total Reward: 82.30022361567735, Q Loss: 1497964.1796875, Actor Loss: -49144.1728515625
Episode 8065: Time: 0.9509997367858887, Total Reward: 992.3160194814924, Q Loss: 22894974.390625, Actor Loss: -516220.822265625
Episode 8066: Time: 0.09721922874450684, Total Reward: 91.15970380826062, Q Loss: 2743058.9453125, Actor Loss: -52289.0888671875
Episode 8067: Time: 0.22043776512145996, Total Reward: 221.13591751532994, Q Loss: 4953879.0546875, Actor Loss: -114905.61083984375

Episode 8068: Time: 0.19339632987976074, Total Reward: 194.20621210578244, Q Loss: 4575851.83984375, Actor Loss: -104561.54541015625
Episode 8069: Time: 0.16733479499816895, Total Reward: 165.3579690515128, Q Loss: 3276608.19921875, Actor Loss: -91607.43310546875
Episode 8070: Time: 0.3171968460083008, Total Reward: 323.2840247021263, Q Loss: 9001413.5859375, Actor Loss: -173287.283203125
Episode 8071: Time: 0.31707167625427246, Total Reward: 324.195256485757, Q Loss: 7585863.09375, Actor Loss: -168940.50170898438
Episode 8072: Time: 0.15894675254821777, Total Reward: 156.3673911653673, Q Loss: 3914750.5078125, Actor Loss: -84572.619140625
Episode 8073: Time: 0.12391376495361328, Total Reward: 119.26412923949977, Q Loss: 2212701.0859375, Actor Loss: -65970.94140625
Episode 8074: Time: 0.07073712348937988, Total Reward: 63.02751796387496, Q Loss: 908801.5, Actor Loss: -38484.95556640625
Episode 8075: Time: 0.31719064712524414, Total Reward: 324.3723808365256, Q Loss: 7905788.28125, Actor Loss: -171803.13745117188
Episode 8076: Time: 0.07952666282653809, Total Reward: 72.02049466883767, Q Loss: 1882191.6171875, Actor Loss: -41155.321533203125
Episode 8077: Time: 0.10615205764770508, Total Reward: 100.15785674955481, Q Loss: 2973367.34375, Actor Loss: -56588.271484375
Episode 8078: Time: 0.17705512046813965, Total Reward: 174.36438365140447, Q Loss: 4412770.7265625, Actor Loss: -94833.52514648438
Episode 8079: Time: 0.6861422061920166, Total Reward: 712.484761443028, Q Loss: 18518646.1640625, Actor Loss: -376296.8811035156
Episode 8080: Time: 0.2026808261871338, Total Reward: 202.1902563416718, Q Loss: 4782509.48828125, Actor Loss: -109122.27880859375
Episode 8081: Time: 0.2907121181488037, Total Reward: 295.83696200161756, Q Loss: 6190884.7421875, Actor Loss: -157973.83520507812
Episode 8082: Time: 0.1846764087677002, Total Reward: 185.1750280905285, Q Loss: 4526199.3671875, Actor Loss: -99820.23046875
Episode 8083: Time: 0.37831711769104004, Total Reward: 388.09949066008267, Q Loss: 9729109.76953125, Actor Loss: -208675.43603515625
Episode 8084: Time: 0.16768908500671387, Total Reward: 166.41996648381908, Q Loss: 4180416.5, Actor Loss: -91683.85815429688
Episode 8085: Time: 0.21287178993225098, Total Reward: 210.6996932683325, Q Loss: 4567354.2421875, Actor Loss: -116949.11499023438
Episode 8086: Time: 0.4219217300415039, Total Reward: 435.9869636502954, Q Loss: 9635513.90625, Actor Loss: -228330.13110351562
Episode 8087: Time: 0.31685709953308105, Total Reward: 324.41280621572, Q Loss: 6780985.1015625, Actor Loss: -172421.20361328125
Episode 8088: Time: 0.352616548538208, Total Reward: 360.8311399295316, Q Loss: 9191156.30859375, Actor Loss: -187917.53833007812
Episode 8089: Time: 0.17599964141845703, Total Reward: 174.77398932775174, Q Loss: 4290679.4375, Actor Loss: -93787.91381835938
Episode 8090: Time: 0.12364745140075684, Total Reward: 119.71443685824757, Q Loss: 2367811.9296875, Actor Loss: -66485.41040039062
Episode 8091: Time: 0.5356009006500244, Total Reward: 556.2766131853768, Q Loss: 14850146.6953125, Actor Loss: -292009.1262207031
Episode 8092: Time: 0.290802001953125, Total Reward: 295.10630444627384, Q Loss: 7305871.45703125, Actor Loss: -159583.0048828125
Episode 8093: Time: 0.2908194065093994, Total Reward: 296.4978361809236, Q Loss: 6991710.57421875, Actor Loss: -157956.58520507812
Episode 8094: Time: 0.21982979774475098, Total Reward: 218.92332724248826, Q Loss: 5199151.7265625, Actor Loss: -121014.53515625
Episode 8095: Time: 0.31696319580078125, Total Reward: 323.137068054481, Q Loss: 8131529.80078125, Actor Loss: -173461.759765625

Episode 8096: Time: 0.16664791107177734, Total Reward: 166.04493237219327, Q Loss: 4252904.234375, Actor Loss: -93161.05932617188
Episode 8097: Time: 0.7459917068481445, Total Reward: 779.7794580897105, Q Loss: 18812856.87109375, Actor Loss: -400922.7580566406
Episode 8098: Time: 0.7202675342559814, Total Reward: 751.3920411559315, Q Loss: 14855876.41015625, Actor Loss: -401813.97705078125
Episode 8099: Time: 0.21293115615844727, Total Reward: 211.16172712824874, Q Loss: 5358344.10546875, Actor Loss: -118268.36474609375
Validation Mean: 9353.768162617489, Validation Std: 0.4784014196554881
saving model
Episode 8100: Time: 0.2927100658416748, Total Reward: 295.34989190335205, Q Loss: 7552640.5859375, Actor Loss: -157498.0078125
Episode 8101: Time: 0.43953585624694824, Total Reward: 454.47582385639913, Q Loss: 12956134.69921875, Actor Loss: -241230.61083984375
Episode 8102: Time: 0.317716121673584, Total Reward: 324.2026271828668, Q Loss: 8495162.484375, Actor Loss: -174225.130859375
Episode 8103: Time: 0.09699797630310059, Total Reward: 91.57548951088943, Q Loss: 1904001.73828125, Actor Loss: -53973.80322265625
Episode 8104: Time: 0.26423048973083496, Total Reward: 267.75248942692957, Q Loss: 5803450.09375, Actor Loss: -143841.7666015625
Episode 8105: Time: 0.7578041553497314, Total Reward: 789.8087537792417, Q Loss: 18030364.39453125, Actor Loss: -412278.97802734375
Episode 8106: Time: 0.19387388229370117, Total Reward: 191.92689542800142, Q Loss: 4749787.5234375, Actor Loss: -104364.26342773438
Episode 8107: Time: 0.4668295383453369, Total Reward: 482.124391282859, Q Loss: 12082607.08203125, Actor Loss: -252172.50439453125
Episode 8108: Time: 0.1587662696838379, Total Reward: 155.6183859379873, Q Loss: 4899548.4453125, Actor Loss: -90320.20654296875
Episode 8109: Time: 0.12370967864990234, Total Reward: 119.52057424444295, Q Loss: 3141205.4296875, Actor Loss: -66996.24560546875
Episode 8110: Time: 0.2995467185974121, Total Reward: 305.591519484258, Q Loss: 7265933.0703125, Actor Loss: -164280.11889648438
Episode 8111: Time: 0.19347834587097168, Total Reward: 193.3114177628758, Q Loss: 4961302.07421875, Actor Loss: -107151.03857421875
Episode 8112: Time: 0.32594943046569824, Total Reward: 333.1386272915682, Q Loss: 9337161.0703125, Actor Loss: -180957.58935546875
Episode 8113: Time: 0.2203829288482666, Total Reward: 220.94494817979398, Q Loss: 4943036.71484375, Actor Loss: -122492.25341796875
Episode 8114: Time: 0.07953929901123047, Total Reward: 72.68077781885358, Q Loss: 2357438.9375, Actor Loss: -42206.283935546875
Episode 8115: Time: 0.20264339447021484, Total Reward: 203.63034185957716, Q Loss: 7073676.609375, Actor Loss: -109387.25952148438
Episode 8116: Time: 0.2479546070098877, Total Reward: 250.10245176906258, Q Loss: 5537067.359375, Actor Loss: -137093.80126953125
Episode 8117: Time: 0.35210299491882324, Total Reward: 361.1755373831918, Q Loss: 8494953.12109375, Actor Loss: -193818.17797851562
Episode 8118: Time: 0.2555239200592041, Total Reward: 255.83710346035787, Q Loss: 5491724.234375, Actor Loss: -138077.26708984375
Episode 8119: Time: 0.5806357860565186, Total Reward: 602.631977320807, Q Loss: 13549363.8515625, Actor Loss: -321216.0427246094
Episode 8120: Time: 0.22037625312805176, Total Reward: 219.97663209110087, Q Loss: 6153267.73046875, Actor Loss: -119885.0166015625
Episode 8121: Time: 0.3518331050872803, Total Reward: 361.2666552314595, Q Loss: 9175378.3359375, Actor Loss: -193003.72827148438
Episode 8122: Time: 0.4580345153808594, Total Reward: 469.936904471019795, Q Loss: 10313829.611328125, Actor Loss: -248477.14428710938

Episode 8123: Time: 0.19429707527160645, Total Reward: 193.86331565695482, Q Loss: 4420501.81640625, Actor Loss: -108408.0400390625
Episode 8124: Time: 0.19417881965637207, Total Reward: 194.2651360765751, Q Loss: 4752208.63671875, Actor Loss: -108315.40966796875
Episode 8125: Time: 0.35447120666503906, Total Reward: 360.8499973555156, Q Loss: 8481472.53125, Actor Loss: -195066.96240234375
Episode 8126: Time: 0.4245028495788574, Total Reward: 435.6922999239306, Q Loss: 12588275.19921875, Actor Loss: -235027.77001953125
Episode 8127: Time: 0.4581117630004883, Total Reward: 470.3409163278749, Q Loss: 13476287.53125, Actor Loss: -255042.36962890625
Episode 8128: Time: 0.5643186569213867, Total Reward: 585.3886399111715, Q Loss: 15059191.37109375, Actor Loss: -312040.4938964844
Episode 8129: Time: 0.8545570373535156, Total Reward: 888.5170840391154, Q Loss: 20973622.3828125, Actor Loss: -475130.0720214844
Episode 8130: Time: 0.08849239349365234, Total Reward: 81.74832892557747, Q Loss: 1823038.6328125, Actor Loss: -49836.9443359375
Episode 8131: Time: 0.07958459854125977, Total Reward: 72.36095590738668, Q Loss: 1827605.8984375, Actor Loss: -45357.8154296875
Episode 8132: Time: 0.40581369400024414, Total Reward: 416.22305489399133, Q Loss: 10066039.25, Actor Loss: -228625.34130859375
Episode 8133: Time: 0.24660444259643555, Total Reward: 249.7015301562812, Q Loss: 5981954.21484375, Actor Loss: -135491.10546875
Episode 8134: Time: 0.30901050567626953, Total Reward: 313.4186666404778, Q Loss: 9257909.1875, Actor Loss: -170738.93798828125
Episode 8135: Time: 0.2911844253540039, Total Reward: 295.6085483858343, Q Loss: 6750086.57421875, Actor Loss: -159718.16430664062
Episode 8136: Time: 0.26439642906188965, Total Reward: 267.7397635313574, Q Loss: 6118179.4921875, Actor Loss: -141302.32666015625
Episode 8137: Time: 0.21362805366516113, Total Reward: 212.50814095125438, Q Loss: 5101969.0078125, Actor Loss: -120583.18994140625
Episode 8138: Time: 0.1410384178161621, Total Reward: 137.92794339017485, Q Loss: 3789455.1171875, Actor Loss: -79478.02856445312
Episode 8139: Time: 0.4408736228942871, Total Reward: 453.1383841970299, Q Loss: 11514753.74609375, Actor Loss: -244748.03002929688
Episode 8140: Time: 0.10600829124450684, Total Reward: 100.34365069396, Q Loss: 2580740.0078125, Actor Loss: -59331.8427734375
Episode 8141: Time: 0.35370659828186035, Total Reward: 361.0341387653877, Q Loss: 9763258.5, Actor Loss: -195451.07250976562
Episode 8142: Time: 0.5288474559783936, Total Reward: 545.2870584645034, Q Loss: 12480157.21875, Actor Loss: -297168.6669921875
Episode 8143: Time: 0.38898420333862305, Total Reward: 399.2108177745385, Q Loss: 9938026.5859375, Actor Loss: -215190.58056640625
Episode 8144: Time: 0.08857989311218262, Total Reward: 81.74639062698219, Q Loss: 1880510.5703125, Actor Loss: -50098.03076171875
Episode 8145: Time: 0.32000064849853516, Total Reward: 324.6123721024609, Q Loss: 6768779.40234375, Actor Loss: -180502.25244140625
Episode 8146: Time: 0.39722204208374023, Total Reward: 407.5145066959406, Q Loss: 9888623.33203125, Actor Loss: -223251.93188476562
Episode 8147: Time: 0.23920488357543945, Total Reward: 238.27459839743725, Q Loss: 6263475.40625, Actor Loss: -133412.05615234375
Episode 8148: Time: 0.2913351058959961, Total Reward: 295.07798186315443, Q Loss: 8839608.484375, Actor Loss: -161491.6630859375
Episode 8149: Time: 0.09700942039489746, Total Reward: 90.25631776566834, Q Loss: 2327091.984375, Actor Loss: -54586.69287109375
Episode 8150: Time: 0.24745965003967285, Total Reward: 249.68789313327045, Q Loss: 5578573.19140625, Actor Loss: -141241.44091796875

Episode 8151: Time: 0.2556133270263672, Total Reward: 257.28655825516955, Q Loss: 6215543.76171875, Actor Loss: -144118.94677734375
Episode 8152: Time: 0.20314764976501465, Total Reward: 203.55876994982754, Q Loss: 4496488.375, Actor Loss: -115609.525390625
Episode 8153: Time: 0.07961606979370117, Total Reward: 72.58155614021962, Q Loss: 2150480.078125, Actor Loss: -43382.064453125
Episode 8154: Time: 0.47493433952331543, Total Reward: 491.83402452957097, Q Loss: 10793512.16015625, Actor Loss: -272163.3962402344
Episode 8155: Time: 0.14095473289489746, Total Reward: 137.9209660737566, Q Loss: 3280257.21484375, Actor Loss: -81590.1220703125
Episode 8156: Time: 0.29979968070983887, Total Reward: 306.0597117337835, Q Loss: 8000327.09375, Actor Loss: -169733.6513671875
Episode 8157: Time: 0.5121176242828369, Total Reward: 525.5520149231403, Q Loss: 11559936.2109375, Actor Loss: -286432.79150390625
Episode 8158: Time: 0.3526432514190674, Total Reward: 360.3138447010813, Q Loss: 8713304.234375, Actor Loss: -196214.80639648438
Episode 8159: Time: 0.28219008445739746, Total Reward: 286.64100180905734, Q Loss: 8555653.23046875, Actor Loss: -160859.04638671875
Episode 8160: Time: 0.264068603515625, Total Reward: 267.4260732447478, Q Loss: 6702893.90625, Actor Loss: -152123.37939453125
Episode 8161: Time: 0.3257882595062256, Total Reward: 332.9979854081693, Q Loss: 7279679.8125, Actor Loss: -186819.5478515625
Episode 8162: Time: 0.09690093994140625, Total Reward: 91.06194215411304, Q Loss: 3033680.6171875, Actor Loss: -56983.8466796875
Episode 8163: Time: 0.5279340744018555, Total Reward: 547.1780718122137, Q Loss: 13167971.0, Actor Loss: -297734.03955078125
Episode 8164: Time: 0.1321110725402832, Total Reward: 128.8448295688546, Q Loss: 3138965.4140625, Actor Loss: -74495.36083984375
Episode 8165: Time: 0.21247339248657227, Total Reward: 212.05813805429145, Q Loss: 3957255.703125, Actor Loss: -115125.19873046875
Episode 8166: Time: 0.12369823455810547, Total Reward: 118.54508120327485, Q Loss: 3530322.07421875, Actor Loss: -71432.7236328125
Episode 8167: Time: 0.14152884483337402, Total Reward: 137.77695728675496, Q Loss: 3255927.203125, Actor Loss: -81331.63037109375
Episode 8168: Time: 0.2203679084777832, Total Reward: 221.37507431734497, Q Loss: 5986733.375, Actor Loss: -125250.41259765625
Episode 8169: Time: 0.35208821296691895, Total Reward: 361.30074354573196, Q Loss: 9020501.6015625, Actor Loss: -194326.0498046875
Episode 8170: Time: 0.5362808704376221, Total Reward: 556.548224884648, Q Loss: 11970867.58984375, Actor Loss: -305132.0812988281
Episode 8171: Time: 0.1586933135986328, Total Reward: 156.15488724010663, Q Loss: 3715838.8515625, Actor Loss: -87008.30126953125
Episode 8172: Time: 0.43088555335998535, Total Reward: 444.97714230704634, Q Loss: 11015588.98046875, Actor Loss: -245197.03979492188
Episode 8173: Time: 0.22040033340454102, Total Reward: 220.05765847701798, Q Loss: 5149837.8515625, Actor Loss: -123719.0654296875
Episode 8174: Time: 0.09676384925842285, Total Reward: 91.428435665725, Q Loss: 2531190.453125, Actor Loss: -53416.701171875
Episode 8175: Time: 0.24699807167053223, Total Reward: 248.71649977056381, Q Loss: 6364879.8515625, Actor Loss: -137631.12060546875
Episode 8176: Time: 0.27309632301330566, Total Reward: 275.5687086017307, Q Loss: 6251436.69921875, Actor Loss: -152201.00659179688
Episode 8177: Time: 0.24667906761169434, Total Reward: 248.3315412511313, Q Loss: 5762811.59375, Actor Loss: -140827.96435546875
Episode 8178: Time: 0.2726588249206543, Total Reward: 277.03026056732324, Q Loss: 7079513.5625, Actor Loss: -153063.53100585938

Episode 8179: Time: 0.2635965347290039, Total Reward: 266.4936777733673, Q Loss: 6493051.265625, Actor Loss: -150520.75146484375
Episode 8180: Time: 0.24661707878112793, Total Reward: 249.3872509658105, Q Loss: 5864035.19921875, Actor Loss: -136270.86889648438
Episode 8181: Time: 0.24570226669311523, Total Reward: 249.1194463344538, Q Loss: 6667815.375, Actor Loss: -141083.49462890625
Episode 8182: Time: 0.16744542121887207, Total Reward: 165.43444728813802, Q Loss: 5143506.15625, Actor Loss: -94054.76806640625
Episode 8183: Time: 0.18443822860717773, Total Reward: 184.23435462882043, Q Loss: 4290254.02734375, Actor Loss: -105643.89501953125
Episode 8184: Time: 0.31651949882507324, Total Reward: 322.4426128838577, Q Loss: 7653829.67578125, Actor Loss: -181975.259765625
Episode 8185: Time: 0.24759817123413086, Total Reward: 248.8613494571873, Q Loss: 7848728.5703125, Actor Loss: -139636.9462890625
Episode 8186: Time: 0.3167438507080078, Total Reward: 323.3822651953281, Q Loss: 7546497.796875, Actor Loss: -183889.97900390625
Episode 8187: Time: 0.09693074226379395, Total Reward: 90.91896193609927, Q Loss: 2221616.8125, Actor Loss: -56736.82177734375
Episode 8188: Time: 0.4300220012664795, Total Reward: 443.48905620138476, Q Loss: 13460219.21875, Actor Loss: -249924.86669921875
Episode 8189: Time: 0.4751918315887451, Total Reward: 489.06621252047415, Q Loss: 13786336.78125, Actor Loss: -271765.81787109375
Episode 8190: Time: 0.18474268913269043, Total Reward: 184.73649113788625, Q Loss: 4121411.8359375, Actor Loss: -106955.53759765625
Episode 8191: Time: 0.175886869430542, Total Reward: 174.50979883107368, Q Loss: 5846835.4453125, Actor Loss: -99743.73291015625
Episode 8192: Time: 0.2731161117553711, Total Reward: 274.9686051453938, Q Loss: 7134098.546875, Actor Loss: -160187.85986328125
Episode 8193: Time: 0.5634922981262207, Total Reward: 585.0377267136915, Q Loss: 16536452.3828125, Actor Loss: -325462.61865234375
Episode 8194: Time: 0.07949662208557129, Total Reward: 72.59706054841708, Q Loss: 2144628.8046875, Actor Loss: -44940.13623046875
Episode 8195: Time: 0.10561132431030273, Total Reward: 100.29367713716142, Q Loss: 2845189.921875, Actor Loss: -60812.26953125
Episode 8196: Time: 0.1147773265838623, Total Reward: 109.90365634462431, Q Loss: 4080309.4375, Actor Loss: -68424.076171875
Episode 8197: Time: 0.2645294666290283, Total Reward: 264.8655864596145, Q Loss: 7922882.8359375, Actor Loss: -156099.87109375
Episode 8198: Time: 0.10598993301391602, Total Reward: 100.791328329936, Q Loss: 2437124.2578125, Actor Loss: -60058.10009765625
Episode 8199: Time: 0.25575971603393555, Total Reward: 258.35777495508995, Q Loss: 7741390.578125, Actor Loss: -144058.84619140625
Validation Mean: 9354.428119695569, Validation Std: 0.3037601769756128
saving model
Episode 8200: Time: 0.14270329475402832, Total Reward: 137.70349676470954, Q Loss: 3611974.9765625, Actor Loss: -80516.04174804688
Episode 8201: Time: 0.17726421356201172, Total Reward: 172.96882556009217, Q Loss: 3796932.99609375, Actor Loss: -100835.96240234375
Episode 8202: Time: 0.25603222846984863, Total Reward: 258.88366269828106, Q Loss: 6194335.390625, Actor Loss: -144932.6845703125
Episode 8203: Time: 0.18496441841125488, Total Reward: 183.44131274507558, Q Loss: 4585526.02734375, Actor Loss: -106105.21728515625
Episode 8204: Time: 0.45769810676574707, Total Reward: 473.42577040734005, Q Loss: 14149793.48828125, Actor Loss: -266294.4860839844
Episode 8205: Time: 0.1409740447998047, Total Reward: 138.28514340075068, Q Loss: 3596554.7265625, Actor Loss: -83626.0205078125

Episode 8206: Time: 0.07141780853271484, Total Reward: 63.13096024414252, Q Loss: 2490049.9375, Actor Loss: -41458.07177734375
Episode 8207: Time: 0.2643454074859619, Total Reward: 267.7255916420863, Q Loss: 6478905.65234375, Actor Loss: -149887.46875
Episode 8208: Time: 0.21140623092651367, Total Reward: 212.25113275055912, Q Loss: 5415486.2265625, Actor Loss: -125556.681640625
Episode 8209: Time: 0.4222719669342041, Total Reward: 435.7110396568464, Q Loss: 10434949.85546875, Actor Loss: -243437.2255859375
Episode 8210: Time: 0.2906317710876465, Total Reward: 294.94286276586314, Q Loss: 5929827.3125, Actor Loss: -168422.12426757812
Episode 8211: Time: 0.21160244941711426, Total Reward: 210.42503762634692, Q Loss: 5190759.765625, Actor Loss: -118159.25634765625
Episode 8212: Time: 0.41361141204833984, Total Reward: 424.9879955191264, Q Loss: 11755421.5546875, Actor Loss: -236355.19482421875
Episode 8213: Time: 0.28044772148132324, Total Reward: 258.9461729951812, Q Loss: 8586216.3125, Actor Loss: -141191.61767578125
Episode 8214: Time: 0.13016104698181152, Total Reward: 100.5623560525372, Q Loss: 3055058.40625, Actor Loss: -62685.93505859375
Episode 8215: Time: 0.38300204277038574, Total Reward: 384.97450938079595, Q Loss: 9710029.046875, Actor Loss: -213894.12280273438
Episode 8216: Time: 0.29186248779296875, Total Reward: 294.89066277897217, Q Loss: 8454080.890625, Actor Loss: -167065.10009765625
Episode 8217: Time: 0.1499783992767334, Total Reward: 147.48755098692274, Q Loss: 4836159.9296875, Actor Loss: -87780.32177734375
Episode 8218: Time: 0.31760406494140625, Total Reward: 322.1793132601157, Q Loss: 10580103.7578125, Actor Loss: -179388.98291015625
Episode 8219: Time: 0.21156549453735352, Total Reward: 210.71985318886172, Q Loss: 6010779.875, Actor Loss: -117537.96069335938
Episode 8220: Time: 0.2645223140716553, Total Reward: 265.5447175808277, Q Loss: 6927681.1015625, Actor Loss: -151360.64697265625
Episode 8221: Time: 0.299884557723999, Total Reward: 304.4566079251017, Q Loss: 8147217.41015625, Actor Loss: -172868.02978515625
Episode 8222: Time: 0.21154546737670898, Total Reward: 211.79455064797773, Q Loss: 6164413.7734375, Actor Loss: -124811.47119140625
Episode 8223: Time: 0.3793301582336426, Total Reward: 389.1390175189112, Q Loss: 10368820.205078125, Actor Loss: -217271.86499023438
Episode 8224: Time: 0.1062464714050293, Total Reward: 100.82923449294357, Q Loss: 3581318.96875, Actor Loss: -59117.3564453125
Episode 8225: Time: 0.5381529331207275, Total Reward: 557.2015391786431, Q Loss: 15839912.5625, Actor Loss: -306741.92919921875
Episode 8226: Time: 0.3880953788757324, Total Reward: 361.1070460745228, Q Loss: 9400279.6015625, Actor Loss: -200378.6376953125
Episode 8227: Time: 0.07447504997253418, Total Reward: 53.49554378454402, Q Loss: 1844058.125, Actor Loss: -35081.78759765625
Episode 8228: Time: 0.44152355194091797, Total Reward: 454.58175400710735, Q Loss: 12702020.34765625, Actor Loss: -251975.24047851562
Episode 8229: Time: 0.466825008392334, Total Reward: 480.5722327892298, Q Loss: 13106558.0390625, Actor Loss: -271824.8046875
Episode 8230: Time: 0.13218450546264648, Total Reward: 128.56706853699148, Q Loss: 3453997.546875, Actor Loss: -79708.9658203125
Episode 8231: Time: 0.23763799667358398, Total Reward: 239.3114074966058, Q Loss: 5325158.51171875, Actor Loss: -137342.18603515625
Episode 8232: Time: 0.10632872581481934, Total Reward: 100.70260155894252, Q Loss: 3459604.4921875, Actor Loss: -61118.84423828125
Episode 8233: Time: 0.49393391609191895, Total Reward: 508.5665555088837, Q Loss: 13268070.3828125, Actor Loss: -279311.64404296875

Episode 8234: Time: 0.5815680027008057, Total Reward: 604.1804108536994, Q Loss: 16682282.515625, Actor Loss: -342202.03515625
Episode 8235: Time: 0.23809313774108887, Total Reward: 239.06311881900209, Q Loss: 5810110.90625, Actor Loss: -133520.87548828125
Episode 8236: Time: 0.18497371673583984, Total Reward: 184.61896565265124, Q Loss: 6210189.015625, Actor Loss: -103767.37841796875
Episode 8237: Time: 0.29088354110717773, Total Reward: 296.1952498059662, Q Loss: 8174025.37109375, Actor Loss: -170573.25073242188
Episode 8238: Time: 0.08810091018676758, Total Reward: 82.29436670572733, Q Loss: 1824523.703125, Actor Loss: -48420.7587890625
Episode 8239: Time: 0.4401850700378418, Total Reward: 454.25872274238924, Q Loss: 12178827.42578125, Actor Loss: -257523.025390625
Episode 8240: Time: 0.10550761222839355, Total Reward: 100.39544348239399, Q Loss: 3400797.2578125, Actor Loss: -61586.068359375
Episode 8241: Time: 0.3696427345275879, Total Reward: 379.02096307121866, Q Loss: 9643125.4765625, Actor Loss: -213945.22900390625
Episode 8242: Time: 0.17641139030456543, Total Reward: 174.66743431886218, Q Loss: 4854273.9609375, Actor Loss: -103164.1240234375
Episode 8243: Time: 0.20272326469421387, Total Reward: 202.73874787481407, Q Loss: 5722719.3984375, Actor Loss: -123403.63671875
Episode 8244: Time: 0.5365128517150879, Total Reward: 554.4413167866662, Q Loss: 13829067.55859375, Actor Loss: -308659.8984375
Episode 8245: Time: 0.3351435661315918, Total Reward: 342.6184544179686, Q Loss: 10383551.1171875, Actor Loss: -197116.4326171875
Episode 8246: Time: 0.16744089126586914, Total Reward: 165.4581711899745, Q Loss: 5765451.109375, Actor Loss: -95449.990234375
Episode 8247: Time: 0.2118380069732666, Total Reward: 211.8772198008473, Q Loss: 5829498.09375, Actor Loss: -123786.60546875
Episode 8248: Time: 0.18486237525939941, Total Reward: 182.95290379181515, Q Loss: 4536238.03515625, Actor Loss: -109725.2919921875
Episode 8249: Time: 0.19428491592407227, Total Reward: 192.11386912555332, Q Loss: 6763617.9921875, Actor Loss: -112348.98681640625
Episode 8250: Time: 0.3348870277404785, Total Reward: 342.8297321027246, Q Loss: 10001201.609375, Actor Loss: -192800.9267578125
Episode 8251: Time: 0.14980077743530273, Total Reward: 146.07028561578989, Q Loss: 3790137.9140625, Actor Loss: -86206.2998046875
Episode 8252: Time: 0.11487078666687012, Total Reward: 110.07560863516532, Q Loss: 3594498.296875, Actor Loss: -68388.36962890625
Episode 8253: Time: 0.3609623908996582, Total Reward: 369.8999508649, Q Loss: 8737406.13671875, Actor Loss: -207366.82177734375
Episode 8254: Time: 0.3971865177154541, Total Reward: 407.14447240719693, Q Loss: 11509337.2109375, Actor Loss: -233159.34912109375
Episode 8255: Time: 0.4937107563018799, Total Reward: 509.8612434432689, Q Loss: 12322332.1484375, Actor Loss: -289431.7175292969
Episode 8256: Time: 0.12364339828491211, Total Reward: 119.38150549169322, Q Loss: 2930093.265625, Actor Loss: -72918.900390625
Episode 8257: Time: 0.46883225440979004, Total Reward: 470.74943720177055, Q Loss: 14718246.4375, Actor Loss: -262850.5478515625
Episode 8258: Time: 0.1653597354888916, Total Reward: 156.54852661779455, Q Loss: 4618482.421875, Actor Loss: -91714.2060546875
Episode 8259: Time: 0.1066741943359375, Total Reward: 100.52570616467595, Q Loss: 2867981.46484375, Actor Loss: -60749.04345703125
Episode 8260: Time: 0.2558586597442627, Total Reward: 257.1624339959725, Q Loss: 7108290.75, Actor Loss: -149646.78076171875
Episode 8261: Time: 0.17698121070861816, Total Reward: 175.29005191755485, Q Loss: 4903872.5390625, Actor Loss: -97834.42919921875

Episode 8262: Time: 0.17745590209960938, Total Reward: 175.0275736499632, Q Loss: 4395446.546875, Actor Loss: -103692.0615234375
Episode 8263: Time: 0.3090245723724365, Total Reward: 314.7180659344755, Q Loss: 9367721.1640625, Actor Loss: -177749.849609375
Episode 8264: Time: 0.176682710647583, Total Reward: 174.57530802267894, Q Loss: 6668485.671875, Actor Loss: -105319.43212890625
Episode 8265: Time: 0.20296907424926758, Total Reward: 202.8746787340525, Q Loss: 6291847.3515625, Actor Loss: -119578.1884765625
Episode 8266: Time: 0.20316028594970703, Total Reward: 201.54824526760478, Q Loss: 7489684.734375, Actor Loss: -121657.8818359375
Episode 8267: Time: 0.11498403549194336, Total Reward: 110.13997283920139, Q Loss: 2954738.5625, Actor Loss: -63425.513671875
Episode 8268: Time: 0.07072877883911133, Total Reward: 62.69555843102276, Q Loss: 1746857.5546875, Actor Loss: -39771.1103515625
Episode 8269: Time: 0.11537957191467285, Total Reward: 110.1089851098516, Q Loss: 2960211.375, Actor Loss: -65861.60107421875
Episode 8270: Time: 0.4589657783508301, Total Reward: 471.91999114592926, Q Loss: 12151264.359375, Actor Loss: -267223.7922363281
Episode 8271: Time: 0.31078577041625977, Total Reward: 313.703157717233, Q Loss: 9381208.046875, Actor Loss: -181842.60595703125
Episode 8272: Time: 0.31723761558532715, Total Reward: 324.03132146880404, Q Loss: 9779621.2421875, Actor Loss: -189854.33935546875
Episode 8273: Time: 0.39604735374450684, Total Reward: 407.45328992403233, Q Loss: 11732053.4765625, Actor Loss: -230121.46240234375
Episode 8274: Time: 0.19426941871643066, Total Reward: 191.7171696700073, Q Loss: 5285359.91796875, Actor Loss: -113321.8330078125
Episode 8275: Time: 0.10635042190551758, Total Reward: 100.72393707740454, Q Loss: 2173236.9453125, Actor Loss: -60789.7138671875
Episode 8276: Time: 0.20258831977844238, Total Reward: 201.68744934939497, Q Loss: 4950732.72265625, Actor Loss: -120503.6826171875
Episode 8277: Time: 0.8963487148284912, Total Reward: 937.9274287108967, Q Loss: 24296792.78515625, Actor Loss: -532071.083984375
Episode 8278: Time: 1.2407009601593018, Total Reward: 1303.1062230822295, Q Loss: 35495270.48828125, Actor Loss: -735212.4328613281
Episode 8279: Time: 0.6870653629302979, Total Reward: 712.3373787744071, Q Loss: 20599033.703125, Actor Loss: -410323.4296875
Episode 8280: Time: 0.3701636791229248, Total Reward: 379.9415609456456, Q Loss: 12321051.87109375, Actor Loss: -219539.27978515625
Episode 8281: Time: 0.40509533882141113, Total Reward: 416.3489505151568, Q Loss: 11613631.984375, Actor Loss: -241835.99169921875
Episode 8282: Time: 0.10602474212646484, Total Reward: 100.81277274002328, Q Loss: 1868123.7578125, Actor Loss: -62375.02978515625
Episode 8283: Time: 0.10668182373046875, Total Reward: 100.67121140592198, Q Loss: 3472528.1171875, Actor Loss: -64641.8759765625
Episode 8284: Time: 0.24774837493896484, Total Reward: 248.74601495809102, Q Loss: 8352223.4453125, Actor Loss: -142727.20434570312
Episode 8285: Time: 0.4674038887023926, Total Reward: 481.65539576609, Q Loss: 12918321.4375, Actor Loss: -278692.0302734375
Episode 8286: Time: 0.15999937057495117, Total Reward: 156.9953678905828, Q Loss: 4203550.453125, Actor Loss: -92555.6005859375
Episode 8287: Time: 0.1869347095489502, Total Reward: 183.65775719455854, Q Loss: 6504992.0859375, Actor Loss: -109847.8310546875
Episode 8288: Time: 0.17740678787231445, Total Reward: 174.69900937740096, Q Loss: 5356805.953125, Actor Loss: -105055.73486328125
Episode 8289: Time: 0.3012697696685791, Total Reward: 304.84190320345743, Q Loss: 10073369.640625, Actor Loss: -175473.84594726562

Episode 8290: Time: 0.11521410942077637, Total Reward: 109.40905549351524, Q Loss: 3840044.3125, Actor Loss: -63132.84765625
Episode 8291: Time: 0.2836599349975586, Total Reward: 286.84664639641665, Q Loss: 8429324.1484375, Actor Loss: -167480.68896484375
Episode 8292: Time: 0.15078973770141602, Total Reward: 146.47249382902677, Q Loss: 5340410.484375, Actor Loss: -89988.90087890625
Episode 8293: Time: 0.380399227142334, Total Reward: 389.25731155770524, Q Loss: 11124386.53125, Actor Loss: -227183.91015625
Episode 8294: Time: 0.16805028915405273, Total Reward: 166.0165640613789, Q Loss: 4980983.76171875, Actor Loss: -101835.75
Episode 8295: Time: 0.29237890243530273, Total Reward: 296.23397012530666, Q Loss: 8780468.625, Actor Loss: -171687.89404296875
Episode 8296: Time: 0.23021435737609863, Total Reward: 229.9422124387578, Q Loss: 5738036.921875, Actor Loss: -135863.18676757812
Episode 8297: Time: 0.35330843925476074, Total Reward: 360.4812631253786, Q Loss: 11572705.640625, Actor Loss: -212690.09130859375
Episode 8298: Time: 0.28334712982177734, Total Reward: 284.5149186972957, Q Loss: 8286647.6171875, Actor Loss: -167616.21240234375
Episode 8299: Time: 0.25708985328674316, Total Reward: 259.14654990984513, Q Loss: 7466942.4609375, Actor Loss: -152872.509765625
Validation Mean: 9352.836327117191, Validation Std: 0.8930726068760213
saving model
Episode 8300: Time: 0.18804459436035156, Total Reward: 183.65600561252117, Q Loss: 5986226.703125, Actor Loss: -113366.37744140625
Episode 8301: Time: 0.3465111255645752, Total Reward: 349.09469931999047, Q Loss: 11027648.4921875, Actor Loss: -206254.140625
Episode 8302: Time: 0.31900930404663086, Total Reward: 323.012399409259, Q Loss: 8708023.3125, Actor Loss: -187216.34887695312
Episode 8303: Time: 0.5039222240447998, Total Reward: 518.5026476313607, Q Loss: 12922027.1328125, Actor Loss: -300635.908203125
Episode 8304: Time: 0.38175034523010254, Total Reward: 388.27754557612957, Q Loss: 9959880.5625, Actor Loss: -224849.70068359375
Episode 8305: Time: 0.26567554473876953, Total Reward: 267.91448028262374, Q Loss: 7796277.140625, Actor Loss: -156760.62646484375
Episode 8306: Time: 0.23102951049804688, Total Reward: 229.84197875550117, Q Loss: 6804149.6015625, Actor Loss: -134560.07763671875
Episode 8307: Time: 0.16889095306396484, Total Reward: 164.7574685537935, Q Loss: 5553507.3203125, Actor Loss: -99918.390625
Episode 8308: Time: 0.24834394454956055, Total Reward: 249.28624165476307, Q Loss: 8160733.578125, Actor Loss: -144673.40966796875
Episode 8309: Time: 0.11529397964477539, Total Reward: 110.1051450064447, Q Loss: 4611518.7578125, Actor Loss: -66464.5947265625
Episode 8310: Time: 0.44280147552490234, Total Reward: 450.80694022265186, Q Loss: 13252670.59375, Actor Loss: -266839.34375
Episode 8311: Time: 0.18631219863891602, Total Reward: 183.73760258329673, Q Loss: 6869613.953125, Actor Loss: -110755.17138671875
Episode 8312: Time: 0.12475943565368652, Total Reward: 119.52767159350438, Q Loss: 3734742.890625, Actor Loss: -74403.884765625
Episode 8313: Time: 0.2751436233520508, Total Reward: 277.4504756556882, Q Loss: 8912325.26953125, Actor Loss: -162608.4453125
Episode 8314: Time: 0.5134670734405518, Total Reward: 525.0367353118587, Q Loss: 14843111.43359375, Actor Loss: -305794.3388671875
Episode 8315: Time: 0.2659111022949219, Total Reward: 268.43049192772526, Q Loss: 7535813.390625, Actor Loss: -161077.892578125
Episode 8316: Time: 0.16872358322143555, Total Reward: 165.771860200334, Q Loss: 5776147.34375, Actor Loss: -99417.96215820312

Episode 8317: Time: 0.17789363861083984, Total Reward: 174.58896877676273, Q Loss: 5853410.7890625, Actor Loss: -106004.49853515625
Episode 8318: Time: 0.30304932594299316, Total Reward: 304.0096442482432, Q Loss: 8052772.2578125, Actor Loss: -180895.8984375
Episode 8319: Time: 0.18753886222839355, Total Reward: 183.1682372822406, Q Loss: 5481850.3359375, Actor Loss: -115783.99658203125
Episode 8320: Time: 0.5500586032867432, Total Reward: 566.020844622899, Q Loss: 18914266.0546875, Actor Loss: -327218.18896484375
Episode 8321: Time: 0.3901395797729492, Total Reward: 397.6367952865348, Q Loss: 11750686.6640625, Actor Loss: -228978.27734375
Episode 8322: Time: 0.3101928234100342, Total Reward: 314.2243530253742, Q Loss: 12354505.3359375, Actor Loss: -187172.9423828125
Episode 8323: Time: 0.2573673725128174, Total Reward: 258.7335009519053, Q Loss: 8022427.65625, Actor Loss: -154032.6455078125
Episode 8324: Time: 0.584683895111084, Total Reward: 603.5230021727186, Q Loss: 17098958.8671875, Actor Loss: -350101.93798828125
Episode 8325: Time: 0.17712640762329102, Total Reward: 174.19539396322023, Q Loss: 5681527.94921875, Actor Loss: -107298.47802734375
Episode 8326: Time: 0.38053226470947266, Total Reward: 388.47090286022615, Q Loss: 10844641.0546875, Actor Loss: -234766.11962890625
Episode 8327: Time: 0.18597817420959473, Total Reward: 183.0184663739472, Q Loss: 5502680.0625, Actor Loss: -113992.2216796875
Episode 8328: Time: 0.2306504249572754, Total Reward: 228.54119986522457, Q Loss: 6659981.9140625, Actor Loss: -142219.4970703125
Episode 8329: Time: 0.16829299926757812, Total Reward: 163.8449127540094, Q Loss: 5131602.046875, Actor Loss: -99365.189453125
Episode 8330: Time: 0.2572963237762451, Total Reward: 258.8472809850298, Q Loss: 7057378.9921875, Actor Loss: -157022.04833984375
Episode 8331: Time: 0.15939760208129883, Total Reward: 155.56961970339594, Q Loss: 4283797.9375, Actor Loss: -95255.41455078125
Episode 8332: Time: 0.20398640632629395, Total Reward: 202.97865008594238, Q Loss: 8445363.8359375, Actor Loss: -125787.05908203125
Episode 8333: Time: 0.4164152145385742, Total Reward: 426.42985126401663, Q Loss: 15648408.3984375, Actor Loss: -250158.55859375
Episode 8334: Time: 0.4687049388885498, Total Reward: 483.09233286476154, Q Loss: 13646607.43359375, Actor Loss: -281686.2331542969
Episode 8335: Time: 0.23111224174499512, Total Reward: 228.30221015382827, Q Loss: 6702079.375, Actor Loss: -139276.1513671875
Episode 8336: Time: 0.06239771842956543, Total Reward: 53.778306429124, Q Loss: 1371204.390625, Actor Loss: -36827.3154296875
Episode 8337: Time: 0.2832827568054199, Total Reward: 286.1224954393114, Q Loss: 8454970.1171875, Actor Loss: -174050.14111328125
Episode 8338: Time: 0.32297468185424805, Total Reward: 324.09734900948894, Q Loss: 10115049.8046875, Actor Loss: -190981.833984375
Episode 8339: Time: 0.37267160415649414, Total Reward: 379.33863319522186, Q Loss: 11928574.8984375, Actor Loss: -217751.11474609375
Episode 8340: Time: 0.26630687713623047, Total Reward: 267.6168816871489, Q Loss: 8881052.1640625, Actor Loss: -159402.544921875
Episode 8341: Time: 0.24799656867980957, Total Reward: 247.97221630131884, Q Loss: 7543551.80859375, Actor Loss: -147327.97998046875
Episode 8342: Time: 0.24882769584655762, Total Reward: 249.19971713347093, Q Loss: 6126380.1953125, Actor Loss: -149954.35498046875
Episode 8343: Time: 0.2490220069885254, Total Reward: 249.5420068133289, Q Loss: 7378930.890625, Actor Loss: -152677.70556640625
Episode 8344: Time: 0.2577245235443115, Total Reward: 259.11141382778925, Q Loss: 6408410.390625, Actor Loss: -153829.38916015625

Episode 8345: Time: 0.19520044326782227, Total Reward: 191.37487142986, Q Loss: 6229934.8125, Actor Loss: -124029.6650390625
Episode 8346: Time: 0.15123391151428223, Total Reward: 145.3970126181682, Q Loss: 5144555.765625, Actor Loss: -91237.458984375
Episode 8347: Time: 0.062261343002319336, Total Reward: 53.49385416583762, Q Loss: 1632906.96875, Actor Loss: -36611.6123046875
Episode 8348: Time: 0.15965580940246582, Total Reward: 156.86484319287206, Q Loss: 5245470.9765625, Actor Loss: -93684.91943359375
Episode 8349: Time: 0.08899235725402832, Total Reward: 81.92356621834969, Q Loss: 2531352.8125, Actor Loss: -54513.2177734375
Episode 8350: Time: 0.22212791442871094, Total Reward: 221.64509450120966, Q Loss: 6865017.3515625, Actor Loss: -138083.51416015625
Episode 8351: Time: 0.398207426071167, Total Reward: 407.76755606522937, Q Loss: 10837082.73046875, Actor Loss: -234121.861328125
Episode 8352: Time: 0.29183077812194824, Total Reward: 294.9124468014051, Q Loss: 9392443.421875, Actor Loss: -177422.35302734375
Episode 8353: Time: 0.2393205165863037, Total Reward: 240.33202097477462, Q Loss: 6343534.234375, Actor Loss: -148238.2744140625
Episode 8354: Time: 0.27534937858581543, Total Reward: 275.9677106218377, Q Loss: 9287165.59375, Actor Loss: -168155.6689453125
Episode 8355: Time: 0.5411765575408936, Total Reward: 555.4782877424266, Q Loss: 18560185.3359375, Actor Loss: -331561.9921875
Episode 8356: Time: 0.08935737609863281, Total Reward: 82.16795119286678, Q Loss: 2561761.4296875, Actor Loss: -53748.93701171875
Episode 8357: Time: 0.22175979614257812, Total Reward: 219.79547481857125, Q Loss: 6259310.9453125, Actor Loss: -135787.27880859375
Episode 8358: Time: 0.2749323844909668, Total Reward: 277.2251054007507, Q Loss: 8331343.44140625, Actor Loss: -163076.34521484375
Episode 8359: Time: 0.426450252532959, Total Reward: 435.73275370494486, Q Loss: 15992201.4921875, Actor Loss: -254721.59130859375
Episode 8360: Time: 0.5400488376617432, Total Reward: 555.9457637444544, Q Loss: 16733429.46875, Actor Loss: -326497.9580078125
Episode 8361: Time: 0.10627031326293945, Total Reward: 100.7201868449029, Q Loss: 3630079.109375, Actor Loss: -62499.29638671875
Episode 8362: Time: 0.1333303451538086, Total Reward: 128.71947730906382, Q Loss: 5083070.2421875, Actor Loss: -80331.3046875
Episode 8363: Time: 0.07984304428100586, Total Reward: 72.24622999653494, Q Loss: 2891175.1796875, Actor Loss: -49092.5146484375
Episode 8364: Time: 0.380385160446167, Total Reward: 389.43038964725395, Q Loss: 12414534.734375, Actor Loss: -233756.04052734375
Episode 8365: Time: 0.13288331031799316, Total Reward: 128.2318444640462, Q Loss: 4978448.6875, Actor Loss: -81570.57666015625
Episode 8366: Time: 0.3562936782836914, Total Reward: 361.49936030127793, Q Loss: 11184894.5390625, Actor Loss: -212734.833984375
Episode 8367: Time: 0.425628662109375, Total Reward: 434.9321962340146, Q Loss: 13857777.46875, Actor Loss: -258290.94873046875
Episode 8368: Time: 0.11499357223510742, Total Reward: 109.86438663601461, Q Loss: 4672317.0, Actor Loss: -71443.12451171875
Episode 8369: Time: 0.11560750007629395, Total Reward: 109.27207737504658, Q Loss: 3055013.671875, Actor Loss: -70084.87060546875
Episode 8370: Time: 0.433591365814209, Total Reward: 441.5871500506773, Q Loss: 13215508.08203125, Actor Loss: -267605.95458984375
Episode 8371: Time: 0.32712316513061523, Total Reward: 331.67123746067284, Q Loss: 9506750.8828125, Actor Loss: -201238.27685546875
Episode 8372: Time: 0.20351529121398926, Total Reward: 203.0445335233325, Q Loss: 7558020.2265625, Actor Loss: -127330.55859375

Episode 8373: Time: 0.09766936302185059, Total Reward: 91.07762550141224, Q Loss: 3255270.21875, Actor Loss: -57031.4697265625
Episode 8374: Time: 0.12430286407470703, Total Reward: 119.41295242981552, Q Loss: 3465814.140625, Actor Loss: -74051.93505859375
Episode 8375: Time: 0.2742576599121094, Total Reward: 277.7076451025051, Q Loss: 7831553.5390625, Actor Loss: -169058.34814453125
Episode 8376: Time: 0.09741830825805664, Total Reward: 91.34282450736893, Q Loss: 3147034.8046875, Actor Loss: -57069.09228515625
Episode 8377: Time: 0.10746145248413086, Total Reward: 100.02419128669858, Q Loss: 4220349.2578125, Actor Loss: -64199.04931640625
Episode 8378: Time: 0.18633008003234863, Total Reward: 184.37688398279627, Q Loss: 5955155.1015625, Actor Loss: -112334.52490234375
Episode 8379: Time: 0.12421202659606934, Total Reward: 119.67261258967453, Q Loss: 3499212.3125, Actor Loss: -74488.2744140625
Episode 8380: Time: 0.37200260162353516, Total Reward: 379.42693628880704, Q Loss: 11993917.9296875, Actor Loss: -228794.5576171875
Episode 8381: Time: 0.07987022399902344, Total Reward: 72.97821275401637, Q Loss: 2218551.859375, Actor Loss: -50968.107421875
Episode 8382: Time: 0.2837188243865967, Total Reward: 287.0647611186663, Q Loss: 9152972.609375, Actor Loss: -172637.34521484375
Episode 8383: Time: 0.16852116584777832, Total Reward: 165.70045204784773, Q Loss: 4594871.2890625, Actor Loss: -102885.7705078125
Episode 8384: Time: 0.1861264705657959, Total Reward: 182.30742451450323, Q Loss: 5230261.74609375, Actor Loss: -111333.08447265625
Episode 8385: Time: 0.33612680435180664, Total Reward: 342.29307082898043, Q Loss: 11765793.26171875, Actor Loss: -205034.251953125
Episode 8386: Time: 0.16840457916259766, Total Reward: 164.68421509556796, Q Loss: 6496964.7734375, Actor Loss: -103264.47900390625
Episode 8387: Time: 0.16008734703063965, Total Reward: 156.33534373918687, Q Loss: 6891354.2265625, Actor Loss: -96103.13818359375
Episode 8388: Time: 0.4422571659088135, Total Reward: 454.21323888818154, Q Loss: 16559168.322265625, Actor Loss: -277100.82177734375
Episode 8389: Time: 0.3015282154083252, Total Reward: 305.44193599580876, Q Loss: 9986061.8203125, Actor Loss: -184471.3125
Episode 8390: Time: 0.13298630714416504, Total Reward: 128.75502814988167, Q Loss: 4516948.3828125, Actor Loss: -81844.5126953125
Episode 8391: Time: 0.18626761436462402, Total Reward: 180.84832796253133, Q Loss: 6268344.0234375, Actor Loss: -115583.56298828125
Episode 8392: Time: 0.07091784477233887, Total Reward: 62.77965450266002, Q Loss: 2384493.7734375, Actor Loss: -45108.80419921875
Episode 8393: Time: 0.1064906120300293, Total Reward: 100.70223326416264, Q Loss: 6114458.9375, Actor Loss: -66920.81787109375
Episode 8394: Time: 0.0717933177947998, Total Reward: 62.76538575862911, Q Loss: 1615245.75, Actor Loss: -43914.71923828125
Episode 8395: Time: 0.21269559860229492, Total Reward: 211.3257614320568, Q Loss: 7103506.5859375, Actor Loss: -127947.3564453125
Episode 8396: Time: 0.3013269901275635, Total Reward: 303.8851645000673, Q Loss: 8654366.65625, Actor Loss: -187984.99169921875
Episode 8397: Time: 0.33632612228393555, Total Reward: 341.6312755121724, Q Loss: 9167585.24609375, Actor Loss: -205036.47509765625
Episode 8398: Time: 0.44247865676879883, Total Reward: 453.5211847233272, Q Loss: 14443096.2421875, Actor Loss: -269220.28515625
Episode 8399: Time: 0.2926194667816162, Total Reward: 295.851401958787, Q Loss: 9125720.25390625, Actor Loss: -181152.984375
Validation Mean: 9354.079187190968, Validation Std: 0.49956188659914197
saving model

Episode 8400: Time: 0.09006834030151367, Total Reward: 82.05206376653561, Q Loss: 2928970.5703125, Actor Loss: -49049.96875
Episode 8401: Time: 0.19516229629516602, Total Reward: 193.24364012737652, Q Loss: 5758489.1328125, Actor Loss: -120601.201171875
Episode 8402: Time: 0.2045278549194336, Total Reward: 202.675177150564, Q Loss: 7303874.5234375, Actor Loss: -128207.037109375
Episode 8403: Time: 0.3279542922973633, Total Reward: 333.5327544563916, Q Loss: 10103039.4765625, Actor Loss: -202560.375
Episode 8404: Time: 0.23998141288757324, Total Reward: 239.76417830899265, Q Loss: 8003346.7265625, Actor Loss: -150185.841796875
Episode 8405: Time: 0.372791051864624, Total Reward: 379.1305477803832, Q Loss: 13279280.7421875, Actor Loss: -221276.70068359375
Episode 8406: Time: 0.35489606857299805, Total Reward: 361.6023789827611, Q Loss: 10420073.578125, Actor Loss: -221232.6240234375
Episode 8407: Time: 0.4430356025695801, Total Reward: 453.22948430855814, Q Loss: 13727423.4921875, Actor Loss: -267197.79248046875
Episode 8408: Time: 0.2834303379058838, Total Reward: 286.67278288165085, Q Loss: 9229118.53125, Actor Loss: -165861.27099609375
Episode 8409: Time: 0.3101992607116699, Total Reward: 314.4790094326862, Q Loss: 11010910.9296875, Actor Loss: -189521.52001953125
Episode 8410: Time: 0.2575094699859619, Total Reward: 257.8537029516873, Q Loss: 7026484.91015625, Actor Loss: -166782.49462890625
Episode 8411: Time: 0.2223515510559082, Total Reward: 220.91104726700877, Q Loss: 6996758.37109375, Actor Loss: -133525.47900390625
Episode 8412: Time: 0.16853022575378418, Total Reward: 164.31453849687335, Q Loss: 4875077.2265625, Actor Loss: -102643.36865234375
Episode 8413: Time: 0.2393181324005127, Total Reward: 240.0361895142133, Q Loss: 8143509.328125, Actor Loss: -149884.123046875
Episode 8414: Time: 0.4692246913909912, Total Reward: 482.507451542212, Q Loss: 12538328.9921875, Actor Loss: -291838.7587890625
Episode 8415: Time: 0.2656867504119873, Total Reward: 268.9035694503836, Q Loss: 8837058.984375, Actor Loss: -167184.24462890625
Episode 8416: Time: 0.3024251461029053, Total Reward: 305.7559635940456, Q Loss: 8870313.484375, Actor Loss: -183143.16357421875
Episode 8417: Time: 0.15082097053527832, Total Reward: 147.0419289038829, Q Loss: 3640895.0, Actor Loss: -92606.4140625
Episode 8418: Time: 0.14202165603637695, Total Reward: 138.01388169502047, Q Loss: 2934457.859375, Actor Loss: -87623.36328125
Episode 8419: Time: 0.14191484451293945, Total Reward: 137.91839444097414, Q Loss: 3552453.7109375, Actor Loss: -87182.19970703125
Episode 8420: Time: 0.17732572555541992, Total Reward: 172.94096097562667, Q Loss: 6260971.2890625, Actor Loss: -105752.73583984375
Episode 8421: Time: 0.29611849784851074, Total Reward: 257.5649493269889, Q Loss: 8778443.734375, Actor Loss: -156597.9951171875
Episode 8422: Time: 0.38459181785583496, Total Reward: 378.7717338193924, Q Loss: 13052915.015625, Actor Loss: -230824.68896484375
Episode 8423: Time: 0.2924025058746338, Total Reward: 294.33081928807763, Q Loss: 9250505.02734375, Actor Loss: -180003.7275390625
Episode 8424: Time: 0.4420137405395508, Total Reward: 452.2183741019032, Q Loss: 12855190.765625, Actor Loss: -276807.43359375
Episode 8425: Time: 0.3985748291015625, Total Reward: 407.55819477437433, Q Loss: 10640565.22265625, Actor Loss: -251524.05224609375
Episode 8426: Time: 0.16806983947753906, Total Reward: 166.02245406200902, Q Loss: 5033120.34375, Actor Loss: -101934.486328125
Episode 8427: Time: 0.12418007850646973, Total Reward: 119.12852128203411, Q Loss: 3576598.234375, Actor Loss: -77852.31982421875

Episode 8428: Time: 0.3281576633453369, Total Reward: 332.89033310632135, Q Loss: 11823706.1640625, Actor Loss: -207201.078125
Episode 8429: Time: 0.26622557640075684, Total Reward: 268.23342882473634, Q Loss: 8686971.984375, Actor Loss: -164835.61962890625
Episode 8430: Time: 0.24823927879333496, Total Reward: 248.67014342431497, Q Loss: 7831089.015625, Actor Loss: -152679.1044921875
Episode 8431: Time: 0.4071190357208252, Total Reward: 416.21801250023003, Q Loss: 14438781.609375, Actor Loss: -251597.3720703125
Episode 8432: Time: 0.37158894538879395, Total Reward: 379.5331510156367, Q Loss: 12624615.734375, Actor Loss: -228397.67236328125
Episode 8433: Time: 0.20394492149353027, Total Reward: 201.64559460815659, Q Loss: 5841167.765625, Actor Loss: -128922.884765625
Episode 8434: Time: 0.6643364429473877, Total Reward: 687.7990190009349, Q Loss: 21761599.9296875, Actor Loss: -412248.38427734375
Episode 8435: Time: 0.16874933242797852, Total Reward: 165.70991357295352, Q Loss: 4881975.3359375, Actor Loss: -107957.2939453125
Episode 8436: Time: 0.31029367446899414, Total Reward: 313.9405421206399, Q Loss: 10094571.4921875, Actor Loss: -190883.07299804688
Episode 8437: Time: 0.34609413146972656, Total Reward: 351.06607403645194, Q Loss: 12212040.0, Actor Loss: -216888.52685546875
Episode 8438: Time: 0.16864800453186035, Total Reward: 166.37816774782377, Q Loss: 5760774.2265625, Actor Loss: -105263.9248046875
Episode 8439: Time: 0.40729546546936035, Total Reward: 417.56259190756185, Q Loss: 12336049.046875, Actor Loss: -256284.85498046875
Episode 8440: Time: 0.3988356590270996, Total Reward: 331.9909363984151, Q Loss: 10625451.3828125, Actor Loss: -203245.3330078125
Episode 8441: Time: 0.3450007438659668, Total Reward: 286.26165303590676, Q Loss: 11774035.671875, Actor Loss: -170020.46240234375
Episode 8442: Time: 0.4744560718536377, Total Reward: 397.4707881693995, Q Loss: 12859657.2890625, Actor Loss: -246922.44287109375
Episode 8443: Time: 0.2160956859588623, Total Reward: 175.2773354967133, Q Loss: 5887886.3359375, Actor Loss: -111220.52197265625
Episode 8444: Time: 0.22693443298339844, Total Reward: 184.09250751066807, Q Loss: 8386493.8984375, Actor Loss: -118947.564453125
Episode 8445: Time: 0.21590876579284668, Total Reward: 174.6832066335776, Q Loss: 5666498.90625, Actor Loss: -112735.89501953125
Episode 8446: Time: 0.4849574565887451, Total Reward: 408.03515247092724, Q Loss: 11929807.1953125, Actor Loss: -252302.1923828125
Episode 8447: Time: 0.818378210067749, Total Reward: 697.2421671891371, Q Loss: 23934820.8125, Actor Loss: -427039.6865234375
Episode 8448: Time: 0.2161273956298828, Total Reward: 174.39059957541895, Q Loss: 6040143.125, Actor Loss: -108606.1083984375
Episode 8449: Time: 0.3235013484954834, Total Reward: 266.3773314696984, Q Loss: 9077533.0390625, Actor Loss: -165012.77587890625
Episode 8450: Time: 1.3469634056091309, Total Reward: 1153.1822337702415, Q Loss: 39584584.7265625, Actor Loss: -701641.4404296875
Episode 8451: Time: 0.4532930850982666, Total Reward: 379.93796313460064, Q Loss: 11238848.578125, Actor Loss: -233359.17578125
Episode 8452: Time: 0.27001500129699707, Total Reward: 220.81144744386017, Q Loss: 6949768.84375, Actor Loss: -141460.88232421875
Episode 8453: Time: 0.48525094985961914, Total Reward: 407.84120796150336, Q Loss: 13154649.109375, Actor Loss: -244163.10107421875
Episode 8454: Time: 0.47463178634643555, Total Reward: 397.1427925024542, Q Loss: 14029834.7578125, Actor Loss: -243887.98486328125
Episode 8455: Time: 0.18362784385681152, Total Reward: 146.94775823908768, Q Loss: 4878448.6328125, Actor Loss: -93334.20068359375

Episode 8456: Time: 0.33426380157470703, Total Reward: 276.9688295526088, Q Loss: 12523131.046875, Actor Loss: -174515.310546875
Episode 8457: Time: 0.36690282821655273, Total Reward: 305.1173321366465, Q Loss: 11670800.7578125, Actor Loss: -191220.1728515625
Episode 8458: Time: 0.39873218536376953, Total Reward: 333.88825889707147, Q Loss: 10312289.4921875, Actor Loss: -211461.26220703125
Episode 8459: Time: 0.6462228298187256, Total Reward: 545.5113683109073, Q Loss: 14038606.375, Actor Loss: -339736.2705078125
Episode 8460: Time: 0.07583785057067871, Total Reward: 53.29088929249881, Q Loss: 1370870.125, Actor Loss: -38812.1767578125
Episode 8461: Time: 0.1621098518371582, Total Reward: 129.12396202439677, Q Loss: 5370799.4375, Actor Loss: -81192.833984375
Episode 8462: Time: 0.2692525386810303, Total Reward: 220.78403000806395, Q Loss: 7164744.0546875, Actor Loss: -140097.99169921875
Episode 8463: Time: 0.11876630783081055, Total Reward: 91.40812285215824, Q Loss: 3841832.5546875, Actor Loss: -62965.4609375
Episode 8464: Time: 0.36653614044189453, Total Reward: 306.2712290191869, Q Loss: 9866355.90625, Actor Loss: -192166.818359375
Episode 8465: Time: 0.3879246711730957, Total Reward: 324.80567590895953, Q Loss: 10446629.8515625, Actor Loss: -202120.76416015625
Episode 8466: Time: 0.1403334140777588, Total Reward: 109.86977764540319, Q Loss: 4893316.6875, Actor Loss: -73328.15087890625
Episode 8467: Time: 0.16228342056274414, Total Reward: 128.89198972240308, Q Loss: 5194108.64453125, Actor Loss: -86076.2587890625
Episode 8468: Time: 0.3234372138977051, Total Reward: 267.0238471087383, Q Loss: 10120566.328125, Actor Loss: -166849.04443359375
Episode 8469: Time: 0.1509544849395752, Total Reward: 118.6883565891931, Q Loss: 3824306.53125, Actor Loss: -77312.7451171875
Episode 8470: Time: 0.06534647941589355, Total Reward: 44.394690945086694, Q Loss: 3439391.5625, Actor Loss: -34493.95068359375
Episode 8471: Time: 0.495894193649292, Total Reward: 416.8989359974535, Q Loss: 16467143.140625, Actor Loss: -257218.13671875
Episode 8472: Time: 0.3993854522705078, Total Reward: 332.92039075106385, Q Loss: 10172293.94140625, Actor Loss: -208715.75341796875
Episode 8473: Time: 0.819044828414917, Total Reward: 695.6311066409937, Q Loss: 24418063.7421875, Actor Loss: -426285.66796875
Episode 8474: Time: 0.2592315673828125, Total Reward: 208.82932571901247, Q Loss: 5721059.078125, Actor Loss: -135078.5341796875
Episode 8475: Time: 0.5174126625061035, Total Reward: 434.57616511862784, Q Loss: 16689904.6875, Actor Loss: -272458.02587890625
Episode 8476: Time: 1.217125415802002, Total Reward: 1038.8092816869614, Q Loss: 36016765.8984375, Actor Loss: -642296.4321289062
Episode 8477: Time: 0.18337774276733398, Total Reward: 146.86509241969466, Q Loss: 4950066.3515625, Actor Loss: -94404.67578125
Episode 8478: Time: 0.2160508632659912, Total Reward: 173.92376894738143, Q Loss: 5968940.9453125, Actor Loss: -113800.94921875
Episode 8479: Time: 0.15116477012634277, Total Reward: 119.06428173911267, Q Loss: 4743524.34375, Actor Loss: -78082.0712890625
Episode 8480: Time: 0.23794221878051758, Total Reward: 192.6770699272715, Q Loss: 6520049.4453125, Actor Loss: -127505.07470703125
Episode 8481: Time: 0.15090489387512207, Total Reward: 119.73226083574909, Q Loss: 4124234.3125, Actor Loss: -81907.30224609375
Episode 8482: Time: 0.3769404888153076, Total Reward: 314.46914873165633, Q Loss: 11679076.3046875, Actor Loss: -196157.423828125
Episode 8483: Time: 0.3018155097961426, Total Reward: 249.3398147484265, Q Loss: 7072471.953125, Actor Loss: -160734.29736328125

Episode 8484: Time: 0.24822187423706055, Total Reward: 198.83809029175168, Q Loss: 7629030.01171875, Actor Loss: -128074.966796875
Episode 8485: Time: 0.3991587162017822, Total Reward: 332.44687160619276, Q Loss: 11699483.40234375, Actor Loss: -210970.44677734375
Episode 8486: Time: 0.6351532936096191, Total Reward: 539.0248732553454, Q Loss: 19252021.46484375, Actor Loss: -330403.08251953125
Episode 8487: Time: 1.2032005786895752, Total Reward: 1030.8892305585362, Q Loss: 32971834.8046875, Actor Loss: -635573.236328125
Episode 8488: Time: 0.08635401725769043, Total Reward: 62.64656434975825, Q Loss: 2196301.7890625, Actor Loss: -46343.0625
Episode 8489: Time: 0.3767561912536621, Total Reward: 314.5564009393676, Q Loss: 11289412.8984375, Actor Loss: -196441.3505859375
Episode 8490: Time: 0.6663258075714111, Total Reward: 565.4173031472702, Q Loss: 17612471.921875, Actor Loss: -359143.76806640625
Episode 8491: Time: 0.5056407451629639, Total Reward: 427.3695786684504, Q Loss: 14418960.9765625, Actor Loss: -267543.3251953125
Episode 8492: Time: 0.21567296981811523, Total Reward: 175.07317413104258, Q Loss: 6694544.5, Actor Loss: -115941.85205078125
Episode 8493: Time: 0.6337471008300781, Total Reward: 537.1417662978223, Q Loss: 20596998.3203125, Actor Loss: -338709.4892578125
Episode 8494: Time: 0.37709546089172363, Total Reward: 314.6399545524562, Q Loss: 9550252.5390625, Actor Loss: -195602.2353515625
Episode 8495: Time: 0.15082550048828125, Total Reward: 119.37930068849853, Q Loss: 3336759.27734375, Actor Loss: -77982.59423828125
Episode 8496: Time: 0.15109872817993164, Total Reward: 119.41408683776162, Q Loss: 5130479.890625, Actor Loss: -78228.9443359375
Episode 8497: Time: 0.3123352527618408, Total Reward: 258.1175262600405, Q Loss: 6392182.7890625, Actor Loss: -168262.94189453125
Episode 8498: Time: 0.48465943336486816, Total Reward: 407.6481451851552, Q Loss: 13909497.33203125, Actor Loss: -257713.7890625
Episode 8499: Time: 0.247788667678833, Total Reward: 203.15323850194892, Q Loss: 7592590.5234375, Actor Loss: -129316.36328125
Validation Mean: 9352.72142212903, Validation Std: 0.8662553160481683
saving model
Episode 8500: Time: 0.27126598358154297, Total Reward: 220.78574134345706, Q Loss: 8817766.5625, Actor Loss: -144509.05029296875
Episode 8501: Time: 0.6568820476531982, Total Reward: 556.5508028559016, Q Loss: 19438948.1953125, Actor Loss: -344911.50146484375
Episode 8502: Time: 0.5491287708282471, Total Reward: 462.99795158429384, Q Loss: 20518333.109375, Actor Loss: -294255.84814453125
Episode 8503: Time: 0.226607084274292, Total Reward: 184.6465584934315, Q Loss: 4629407.1484375, Actor Loss: -116906.10986328125
Episode 8504: Time: 0.09717202186584473, Total Reward: 72.04085567028439, Q Loss: 2679995.65625, Actor Loss: -50402.6201171875
Episode 8505: Time: 0.46334266662597656, Total Reward: 388.5684294029163, Q Loss: 13865264.078125, Actor Loss: -247088.7783203125
Episode 8506: Time: 0.38822150230407715, Total Reward: 323.82715989170947, Q Loss: 9891709.671875, Actor Loss: -207239.23095703125
Episode 8507: Time: 0.2803680896759033, Total Reward: 231.207901638812, Q Loss: 7125094.4609375, Actor Loss: -145485.2939453125
Episode 8508: Time: 0.19438767433166504, Total Reward: 156.76692333034904, Q Loss: 5436020.546875, Actor Loss: -101656.64892578125
Episode 8509: Time: 0.7005336284637451, Total Reward: 594.3765318646854, Q Loss: 20332123.0546875, Actor Loss: -375742.65576171875
Episode 8510: Time: 0.12946414947509766, Total Reward: 100.34261886340418, Q Loss: 3737017.38671875, Actor Loss: -67742.5224609375

Episode 8511: Time: 0.2370290756225586, Total Reward: 193.99657254658226, Q Loss: 6958558.890625, Actor Loss: -122352.08056640625
Episode 8512: Time: 0.4524688720703125, Total Reward: 380.1755726424037, Q Loss: 13739238.28125, Actor Loss: -241287.45361328125
Episode 8513: Time: 0.3125636577606201, Total Reward: 256.77055818862675, Q Loss: 11563074.4765625, Actor Loss: -167327.92529296875
Episode 8514: Time: 0.37791919708251953, Total Reward: 314.52369836719384, Q Loss: 9528598.87109375, Actor Loss: -200105.216796875
Episode 8515: Time: 0.2373208999633789, Total Reward: 193.7702330194489, Q Loss: 6911039.78125, Actor Loss: -127144.89892578125
Episode 8516: Time: 0.19432663917541504, Total Reward: 155.49500882603698, Q Loss: 5390755.796875, Actor Loss: -103551.2265625
Episode 8517: Time: 0.08682894706726074, Total Reward: 63.443034198483275, Q Loss: 2385840.5703125, Actor Loss: -44825.392578125
Episode 8518: Time: 0.5813243389129639, Total Reward: 491.46655428123415, Q Loss: 22064437.9765625, Actor Loss: -310210.0380859375
Episode 8519: Time: 0.7102715969085693, Total Reward: 604.0835896544726, Q Loss: 22621375.03125, Actor Loss: -380436.8837890625
Episode 8520: Time: 0.2697930335998535, Total Reward: 221.79577062904488, Q Loss: 8134003.8046875, Actor Loss: -144065.916015625
Episode 8521: Time: 0.1616058349609375, Total Reward: 128.76149450989925, Q Loss: 4765960.578125, Actor Loss: -84776.32275390625
Episode 8522: Time: 0.8158116340637207, Total Reward: 508.565530547648, Q Loss: 18788220.42578125, Actor Loss: -325636.80224609375
Episode 8523: Time: 0.5782716274261475, Total Reward: 351.70726793059083, Q Loss: 13515580.65234375, Actor Loss: -226630.46875
Episode 8524: Time: 0.1635589599609375, Total Reward: 91.39616082476056, Q Loss: 2424193.0546875, Actor Loss: -62128.96728515625
Episode 8525: Time: 0.6236739158630371, Total Reward: 378.5009280544506, Q Loss: 11696365.8125, Actor Loss: -245834.42578125
Episode 8526: Time: 0.7278835773468018, Total Reward: 444.05053693576366, Q Loss: 15367548.0546875, Actor Loss: -282932.9521484375
Episode 8527: Time: 0.609398365020752, Total Reward: 369.95369221398244, Q Loss: 12568527.0859375, Actor Loss: -238252.7548828125
Episode 8528: Time: 0.14878153800964355, Total Reward: 81.94352634272803, Q Loss: 3648013.21875, Actor Loss: -57779.4189453125
Episode 8529: Time: 0.8169102668762207, Total Reward: 499.17369022229104, Q Loss: 14795376.578125, Actor Loss: -318062.669921875
Episode 8530: Time: 0.4461939334869385, Total Reward: 266.18261586722736, Q Loss: 8640370.578125, Actor Loss: -171398.01220703125
Episode 8531: Time: 0.564507007598877, Total Reward: 342.5153784184834, Q Loss: 11777935.84375, Actor Loss: -220332.3662109375
Episode 8532: Time: 0.3718891143798828, Total Reward: 221.5730602670548, Q Loss: 8588398.09375, Actor Loss: -144685.1962890625
Episode 8533: Time: 0.41527843475341797, Total Reward: 248.38884845111056, Q Loss: 9944681.046875, Actor Loss: -163825.33154296875
Episode 8534: Time: 0.371274471282959, Total Reward: 221.67921545319018, Q Loss: 9165330.953125, Actor Loss: -142255.8447265625
Episode 8535: Time: 0.4893317222595215, Total Reward: 295.84368190076, Q Loss: 11856719.3125, Actor Loss: -185176.26611328125
Episode 8536: Time: 0.17847132682800293, Total Reward: 100.49623642173329, Q Loss: 3821216.8125, Actor Loss: -69404.4189453125
Episode 8537: Time: 0.43074750900268555, Total Reward: 257.41862352751525, Q Loss: 8649707.453125, Actor Loss: -169146.689453125
Episode 8538: Time: 0.5196821689605713, Total Reward: 315.0514612746226, Q Loss: 11908330.171875, Actor Loss: -206696.9248046875

Episode 8539: Time: 0.727320671081543, Total Reward: 443.5650779234306, Q Loss: 15675118.140625, Actor Loss: -282732.67431640625
Episode 8540: Time: 0.25246644020080566, Total Reward: 147.8058296445226, Q Loss: 5035722.1796875, Actor Loss: -96887.59814453125
Episode 8541: Time: 0.32772135734558105, Total Reward: 193.68595759958134, Q Loss: 6159949.2109375, Actor Loss: -129519.98974609375
Episode 8542: Time: 0.32715916633605957, Total Reward: 194.12057245964397, Q Loss: 8419857.0625, Actor Loss: -127624.587890625
Episode 8543: Time: 0.1341714859008789, Total Reward: 72.32260334324228, Q Loss: 3119834.03125, Actor Loss: -51754.69482421875
Episode 8544: Time: 0.7715787887573242, Total Reward: 472.1945222769283, Q Loss: 17178764.46875, Actor Loss: -301804.4052734375
Episode 8545: Time: 0.25259828567504883, Total Reward: 146.93949932553534, Q Loss: 4192251.359375, Actor Loss: -96626.8564453125
Episode 8546: Time: 0.16320514678955078, Total Reward: 91.47205045411991, Q Loss: 4348921.375, Actor Loss: -62342.3427734375
Episode 8547: Time: 0.6680357456207275, Total Reward: 406.4747261757846, Q Loss: 14105456.0625, Actor Loss: -266665.52294921875
Episode 8548: Time: 0.13375616073608398, Total Reward: 72.7631209877576, Q Loss: 3064841.984375, Actor Loss: -52536.5546875
Episode 8549: Time: 0.4310111999511719, Total Reward: 259.24497589442916, Q Loss: 9309214.8515625, Actor Loss: -170770.576171875
Episode 8550: Time: 0.5498912334442139, Total Reward: 332.2199395347918, Q Loss: 12624667.6640625, Actor Loss: -212990.36962890625
Episode 8551: Time: 0.34209322929382324, Total Reward: 201.69623372143863, Q Loss: 7591731.140625, Actor Loss: -128013.99755859375
Episode 8552: Time: 0.5356035232543945, Total Reward: 322.8700306616753, Q Loss: 11727261.703125, Actor Loss: -207346.455078125
Episode 8553: Time: 0.37143516540527344, Total Reward: 219.774588955371, Q Loss: 6110859.9453125, Actor Loss: -144013.57177734375
Episode 8554: Time: 0.16338443756103516, Total Reward: 91.37987709532182, Q Loss: 4665292.984375, Actor Loss: -64377.61328125
Episode 8555: Time: 0.47548580169677734, Total Reward: 286.23176320570155, Q Loss: 10624707.078125, Actor Loss: -194550.83154296875
Episode 8556: Time: 0.28227901458740234, Total Reward: 165.62443088061778, Q Loss: 7385831.765625, Actor Loss: -109398.919921875
Episode 8557: Time: 0.3272993564605713, Total Reward: 194.34232981115196, Q Loss: 8991833.28125, Actor Loss: -128823.64892578125
Episode 8558: Time: 0.32677769660949707, Total Reward: 194.06301450000683, Q Loss: 7291534.265625, Actor Loss: -128566.11474609375
Episode 8559: Time: 0.6226143836975098, Total Reward: 380.3471528977651, Q Loss: 14269654.921875, Actor Loss: -243593.5947265625
Episode 8560: Time: 0.40094614028930664, Total Reward: 239.42128678862633, Q Loss: 8888880.1640625, Actor Loss: -158358.19287109375
Episode 8561: Time: 0.7409329414367676, Total Reward: 453.7410172945715, Q Loss: 19764658.265625, Actor Loss: -290635.17236328125
Episode 8562: Time: 0.44554758071899414, Total Reward: 266.11718919160046, Q Loss: 10826697.296875, Actor Loss: -174578.421875
Episode 8563: Time: 0.47458505630493164, Total Reward: 285.86609982157734, Q Loss: 9066888.84375, Actor Loss: -184950.46044921875
Episode 8564: Time: 0.8900332450866699, Total Reward: 547.5312474926216, Q Loss: 18698898.734375, Actor Loss: -349108.96630859375
Episode 8565: Time: 0.6840763092041016, Total Reward: 415.9314634921076, Q Loss: 14000336.6640625, Actor Loss: -269098.1259765625
Episode 8566: Time: 0.3412275993347168, Total Reward: 201.93562251970124, Q Loss: 8148268.9609375, Actor Loss: -130353.12939453125

Episode 8567: Time: 0.29746246337890625, Total Reward: 174.6196407867115, Q Loss: 6957023.546875, Actor Loss: -117556.42236328125
Episode 8568: Time: 0.519428014755249, Total Reward: 314.2196531268816, Q Loss: 10479771.234375, Actor Loss: -203252.640625
Episode 8569: Time: 0.6974565982818604, Total Reward: 426.6682369438238, Q Loss: 14562234.9140625, Actor Loss: -278909.3115234375
Episode 8570: Time: 0.6226708889007568, Total Reward: 379.11908989288463, Q Loss: 13091590.8125, Actor Loss: -243256.58447265625
Episode 8571: Time: 0.10425400733947754, Total Reward: 53.7555126011076, Q Loss: 1340868.015625, Actor Loss: -40307.94775390625
Episode 8572: Time: 0.3124501705169678, Total Reward: 183.95391566494933, Q Loss: 6174159.40625, Actor Loss: -122918.32666015625
Episode 8573: Time: 0.519780158996582, Total Reward: 312.60957734117085, Q Loss: 11008811.1796875, Actor Loss: -203994.65673828125
Episode 8574: Time: 0.26753807067871094, Total Reward: 156.45776882303915, Q Loss: 6050432.5, Actor Loss: -106633.40380859375
Episode 8575: Time: 0.563849687576294, Total Reward: 339.9601072180612, Q Loss: 12643655.359375, Actor Loss: -226661.732421875
Episode 8576: Time: 1.0230226516723633, Total Reward: 630.0911831483855, Q Loss: 19470600.9921875, Actor Loss: -409386.3779296875
Episode 8577: Time: 1.9740715026855469, Total Reward: 1224.7683042840408, Q Loss: 42751672.9296875, Actor Loss: -782689.8793945312
Episode 8578: Time: 0.3864247798919678, Total Reward: 230.53399631478942, Q Loss: 8382454.953125, Actor Loss: -154639.68603515625
Episode 8579: Time: 0.6833324432373047, Total Reward: 418.226202857816, Q Loss: 16118440.3828125, Actor Loss: -274314.66259765625
Episode 8580: Time: 0.3422524929046631, Total Reward: 202.8637028823599, Q Loss: 7197607.4765625, Actor Loss: -134999.05615234375
Episode 8581: Time: 0.44576382637023926, Total Reward: 266.5366142538786, Q Loss: 10471325.6640625, Actor Loss: -177330.3056640625
Episode 8582: Time: 0.22357535362243652, Total Reward: 128.72737130500363, Q Loss: 6091133.5859375, Actor Loss: -85519.92578125
Episode 8583: Time: 0.4156534671783447, Total Reward: 248.33659548697312, Q Loss: 7793111.4296875, Actor Loss: -167978.5048828125
Episode 8584: Time: 0.8018920421600342, Total Reward: 491.55305829984144, Q Loss: 16654127.390625, Actor Loss: -325753.6552734375
Episode 8585: Time: 0.1339397430419922, Total Reward: 72.26268074373802, Q Loss: 2137541.0546875, Actor Loss: -52832.322265625
Episode 8586: Time: 0.44599413871765137, Total Reward: 265.6830650487032, Q Loss: 9942188.140625, Actor Loss: -183168.390625
Episode 8587: Time: 0.23818492889404297, Total Reward: 137.9266584524235, Q Loss: 6394645.765625, Actor Loss: -95932.65966796875
Episode 8588: Time: 0.4607405662536621, Total Reward: 276.1025744031384, Q Loss: 9625226.9296875, Actor Loss: -181192.42041015625
Episode 8589: Time: 0.14874744415283203, Total Reward: 82.27483552466275, Q Loss: 2936776.921875, Actor Loss: -58633.97265625
Episode 8590: Time: 0.3865501880645752, Total Reward: 228.5443661335652, Q Loss: 9244278.8828125, Actor Loss: -150760.51171875
Episode 8591: Time: 0.8474335670471191, Total Reward: 520.6382218015127, Q Loss: 17423044.15625, Actor Loss: -332617.6181640625
Episode 8592: Time: 0.29782962799072266, Total Reward: 174.39344682506297, Q Loss: 6982649.7734375, Actor Loss: -118917.400390625
Episode 8593: Time: 0.31225109100341797, Total Reward: 184.21953743822672, Q Loss: 7146214.625, Actor Loss: -125125.27880859375
Episode 8594: Time: 0.2230546474456787, Total Reward: 128.5888554932049, Q Loss: 5868523.7109375, Actor Loss: -89794.39501953125

Episode 8595: Time: 0.3570563793182373, Total Reward: 212.0139913127396, Q Loss: 10081564.0234375, Actor Loss: -145309.58056640625
Episode 8596: Time: 0.32791948318481445, Total Reward: 193.42284192906203, Q Loss: 6674116.5625, Actor Loss: -128829.8388671875
Episode 8597: Time: 0.22337079048156738, Total Reward: 128.8382479225988, Q Loss: 5080082.33203125, Actor Loss: -87079.15478515625
Episode 8598: Time: 0.19361257553100586, Total Reward: 109.99923308652413, Q Loss: 4665929.421875, Actor Loss: -79851.80322265625
Episode 8599: Time: 0.267681360244751, Total Reward: 155.8085966902989, Q Loss: 6355948.578125, Actor Loss: -108518.31201171875
Validation Mean: 9352.422640154538, Validation Std: 1.0313839019957527
saving model
Episode 8600: Time: 0.7102820873260498, Total Reward: 406.39348497093494, Q Loss: 12763092.25, Actor Loss: -275514.484375
Episode 8601: Time: 0.33095693588256836, Total Reward: 191.56725839556785, Q Loss: 5906635.265625, Actor Loss: -134885.5458984375
Episode 8602: Time: 0.38817477226257324, Total Reward: 231.55317067826712, Q Loss: 9652509.390625, Actor Loss: -153666.96630859375
Episode 8603: Time: 0.23891854286193848, Total Reward: 138.31610088299408, Q Loss: 5489212.578125, Actor Loss: -92845.83544921875
Episode 8604: Time: 0.5512681007385254, Total Reward: 332.1024767746966, Q Loss: 12111465.1953125, Actor Loss: -219804.13671875
Episode 8605: Time: 0.5514049530029297, Total Reward: 332.3207288395618, Q Loss: 12139043.9453125, Actor Loss: -212893.55688476562
Episode 8606: Time: 0.5661144256591797, Total Reward: 340.7554768871566, Q Loss: 11298258.3359375, Actor Loss: -223504.8720703125
Episode 8607: Time: 0.5059609413146973, Total Reward: 302.1478478142267, Q Loss: 10149373.96875, Actor Loss: -207353.732421875
Episode 8608: Time: 0.3129274845123291, Total Reward: 184.94860040936632, Q Loss: 6410265.3359375, Actor Loss: -124900.1630859375
Episode 8609: Time: 0.7136235237121582, Total Reward: 434.63575483558196, Q Loss: 15097078.328125, Actor Loss: -290897.8623046875
Episode 8610: Time: 0.35730648040771484, Total Reward: 213.00135570242793, Q Loss: 8375424.9140625, Actor Loss: -140243.298828125
Episode 8611: Time: 0.08952903747558594, Total Reward: 44.612525805316764, Q Loss: 2504533.765625, Actor Loss: -35008.056640625
Episode 8612: Time: 0.6246459484100342, Total Reward: 379.3809910147664, Q Loss: 14297629.8359375, Actor Loss: -247975.2392578125
Episode 8613: Time: 0.31267261505126953, Total Reward: 184.51006441005273, Q Loss: 7405573.96875, Actor Loss: -129217.45947265625
Episode 8614: Time: 0.9817080497741699, Total Reward: 601.8865696457224, Q Loss: 22812294.9296875, Actor Loss: -393919.220703125
Episode 8615: Time: 0.5505852699279785, Total Reward: 332.7143525444843, Q Loss: 11079504.83203125, Actor Loss: -221798.16357421875
Episode 8616: Time: 0.4605214595794678, Total Reward: 277.8466559044011, Q Loss: 10647702.3125, Actor Loss: -178995.294921875
Episode 8617: Time: 0.5644524097442627, Total Reward: 342.57084517348625, Q Loss: 12659169.609375, Actor Loss: -223542.259765625
Episode 8618: Time: 0.742171049118042, Total Reward: 454.4640587874893, Q Loss: 14838454.484375, Actor Loss: -301329.39013671875
Episode 8619: Time: 0.5802006721496582, Total Reward: 351.90213252976093, Q Loss: 15753011.2421875, Actor Loss: -229609.01025390625
Episode 8620: Time: 0.4908449649810791, Total Reward: 294.56281357090984, Q Loss: 12743135.09375, Actor Loss: -198583.35546875
Episode 8621: Time: 1.1139779090881348, Total Reward: 685.7102345169519, Q Loss: 23573172.5703125, Actor Loss: -450528.58349609375

Episode 8622: Time: 0.5208349227905273, Total Reward: 315.084785314289, Q Loss: 11868219.125, Actor Loss: -208573.21826171875
Episode 8623: Time: 0.5800457000732422, Total Reward: 352.2721859293031, Q Loss: 12616504.25, Actor Loss: -230702.5703125
Episode 8624: Time: 0.5201597213745117, Total Reward: 313.98993329019936, Q Loss: 10835537.71875, Actor Loss: -214753.57275390625
Episode 8625: Time: 0.19338274002075195, Total Reward: 110.08280379228943, Q Loss: 3706315.5546875, Actor Loss: -76383.0380859375
Episode 8626: Time: 0.5051846504211426, Total Reward: 304.9890113390755, Q Loss: 10183202.13671875, Actor Loss: -209554.763671875
Episode 8627: Time: 0.3868072032928467, Total Reward: 230.79575124248123, Q Loss: 9440914.1015625, Actor Loss: -153860.85400390625
Episode 8628: Time: 0.2383580207824707, Total Reward: 136.7795051418823, Q Loss: 5650924.40625, Actor Loss: -99674.673828125
Episode 8629: Time: 0.6099081039428711, Total Reward: 369.44654099462787, Q Loss: 16850003.421875, Actor Loss: -250868.75830078125
Episode 8630: Time: 0.5058319568634033, Total Reward: 303.78145311407803, Q Loss: 11610116.265625, Actor Loss: -208140.9384765625
Episode 8631: Time: 0.3419044017791748, Total Reward: 202.8463725066354, Q Loss: 7081015.25, Actor Loss: -138255.453125
Episode 8632: Time: 0.9953937530517578, Total Reward: 612.0181578257191, Q Loss: 24442239.78515625, Actor Loss: -396714.49853515625
Episode 8633: Time: 0.7869675159454346, Total Reward: 481.9910236444234, Q Loss: 16605641.0390625, Actor Loss: -325366.4150390625
Episode 8634: Time: 0.34172940254211426, Total Reward: 203.23586128271728, Q Loss: 8008952.359375, Actor Loss: -139316.46142578125
Episode 8635: Time: 0.2675163745880127, Total Reward: 156.93878393447696, Q Loss: 6060316.8203125, Actor Loss: -108422.7158203125
Episode 8636: Time: 0.17847108840942383, Total Reward: 100.6683647487757, Q Loss: 4643546.671875, Actor Loss: -72947.77197265625
Episode 8637: Time: 0.16390776634216309, Total Reward: 91.26396803484005, Q Loss: 3651544.15625, Actor Loss: -69697.6171875
Episode 8638: Time: 0.2972583770751953, Total Reward: 175.5972175187171, Q Loss: 5954275.21875, Actor Loss: -123527.279296875
Episode 8639: Time: 0.7276580333709717, Total Reward: 444.61767629963964, Q Loss: 15863096.140625, Actor Loss: -301240.30615234375
Episode 8640: Time: 0.1636943817138672, Total Reward: 91.54195380339912, Q Loss: 2567760.6875, Actor Loss: -66126.1044921875
Episode 8641: Time: 0.25281763076782227, Total Reward: 147.28864939915587, Q Loss: 4844253.359375, Actor Loss: -103125.5849609375
Episode 8642: Time: 0.22312402725219727, Total Reward: 127.99100750551835, Q Loss: 4189955.484375, Actor Loss: -88688.28125
Episode 8643: Time: 0.623610258102417, Total Reward: 378.2872450525087, Q Loss: 12735385.640625, Actor Loss: -259062.74609375
Episode 8644: Time: 0.20820021629333496, Total Reward: 119.01107839590614, Q Loss: 4491627.328125, Actor Loss: -86611.94580078125
Episode 8645: Time: 0.1341567039489746, Total Reward: 72.63479873673707, Q Loss: 3248406.375, Actor Loss: -51393.1943359375
Episode 8646: Time: 0.756589412689209, Total Reward: 463.2431880960718, Q Loss: 18292271.9375, Actor Loss: -312746.59423828125
Episode 8647: Time: 0.4904491901397705, Total Reward: 295.61553023645627, Q Loss: 15428712.46875, Actor Loss: -195763.673828125
Episode 8648: Time: 0.5493948459625244, Total Reward: 332.053746087032, Q Loss: 16710076.4296875, Actor Loss: -219654.6630859375
Episode 8649: Time: 0.3420281410217285, Total Reward: 202.53062149855734, Q Loss: 7971633.6640625, Actor Loss: -139783.8291015625

Episode 8650: Time: 0.2230064868927002, Total Reward: 128.3287352981768, Q Loss: 3905833.796875, Actor Loss: -87575.912109375
Episode 8651: Time: 0.5341277122497559, Total Reward: 322.86222922836055, Q Loss: 9721941.84375, Actor Loss: -219398.7626953125
Episode 8652: Time: 0.46038246154785156, Total Reward: 276.921185185218, Q Loss: 8762468.5390625, Actor Loss: -186100.18017578125
Episode 8653: Time: 0.429854154586792, Total Reward: 257.05394579805505, Q Loss: 10951753.1484375, Actor Loss: -176726.09912109375
Episode 8654: Time: 0.26787829399108887, Total Reward: 155.71499601175978, Q Loss: 5698797.6171875, Actor Loss: -111372.244140625
Episode 8655: Time: 0.7714908123016357, Total Reward: 472.0448684523457, Q Loss: 17966211.73828125, Actor Loss: -325211.65234375
Episode 8656: Time: 1.2468791007995605, Total Reward: 771.086274492307, Q Loss: 26447014.2109375, Actor Loss: -516588.9609375
Episode 8657: Time: 0.5501534938812256, Total Reward: 331.9660392268828, Q Loss: 15911992.6796875, Actor Loss: -226462.90869140625
Episode 8658: Time: 0.9954242706298828, Total Reward: 612.471105845049, Q Loss: 20199507.828125, Actor Loss: -404638.330078125
Episode 8659: Time: 0.5052087306976318, Total Reward: 306.0834613816102, Q Loss: 11237707.8046875, Actor Loss: -206459.82080078125
Episode 8660: Time: 0.14884209632873535, Total Reward: 82.14194735239677, Q Loss: 2940126.9453125, Actor Loss: -63390.560546875
Episode 8661: Time: 0.20850229263305664, Total Reward: 118.96085382760344, Q Loss: 5100990.8203125, Actor Loss: -84786.3896484375
Episode 8662: Time: 0.10437297821044922, Total Reward: 53.43926187179979, Q Loss: 2916060.375, Actor Loss: -42213.1806640625
Episode 8663: Time: 0.4458332061767578, Total Reward: 268.4160350460747, Q Loss: 12139100.984375, Actor Loss: -184569.560546875
Episode 8664: Time: 0.28276681900024414, Total Reward: 166.27228708386545, Q Loss: 6784896.0703125, Actor Loss: -117325.79248046875
Episode 8665: Time: 0.534757137298584, Total Reward: 324.7789142221853, Q Loss: 9647694.6015625, Actor Loss: -221702.36181640625
Episode 8666: Time: 0.43187785148620605, Total Reward: 258.79444990698425, Q Loss: 10165288.53125, Actor Loss: -178396.74560546875
Episode 8667: Time: 0.831679105758667, Total Reward: 511.1342135921443, Q Loss: 17892052.6328125, Actor Loss: -344709.56787109375
Episode 8668: Time: 0.7590231895446777, Total Reward: 461.6380030442562, Q Loss: 17806024.6484375, Actor Loss: -321844.76025390625
Episode 8669: Time: 0.2531912326812744, Total Reward: 147.4330168170415, Q Loss: 7172627.9375, Actor Loss: -105177.2236328125
Episode 8670: Time: 0.9507780075073242, Total Reward: 584.6189849605571, Q Loss: 22520360.23046875, Actor Loss: -387721.7548828125
Episode 8671: Time: 0.5203535556793213, Total Reward: 314.94548967064486, Q Loss: 10571806.3828125, Actor Loss: -214896.697265625
Episode 8672: Time: 0.6393351554870605, Total Reward: 388.18850155515884, Q Loss: 12918471.265625, Actor Loss: -261500.86669921875
Episode 8673: Time: 0.6095023155212402, Total Reward: 369.4259709595, Q Loss: 14003507.09375, Actor Loss: -251318.57177734375
Episode 8674: Time: 0.8461482524871826, Total Reward: 516.723977447559, Q Loss: 21494269.75, Actor Loss: -357198.47998046875
Episode 8675: Time: 0.17842912673950195, Total Reward: 100.96429443496596, Q Loss: 3461945.65625, Actor Loss: -76544.35595703125
Episode 8676: Time: 0.6680800914764404, Total Reward: 407.57626863508295, Q Loss: 13988448.765625, Actor Loss: -275492.24755859375
Episode 8677: Time: 0.19335079193115234, Total Reward: 109.9558476229 3274, Q Loss: 3968718.375, Actor Loss: -80297.66845703125

Episode 8678: Time: 0.520235538482666, Total Reward: 313.515761445323, Q Loss: 13020481.859375, Actor Loss: -215090.4716796875
Episode 8679: Time: 0.5499589443206787, Total Reward: 331.7752459449098, Q Loss: 13858879.6484375, Actor Loss: -230330.1572265625
Episode 8680: Time: 0.22361516952514648, Total Reward: 127.8445399479792, Q Loss: 3855645.765625, Actor Loss: -92628.1533203125
Episode 8681: Time: 0.43147969245910645, Total Reward: 259.1785389083812, Q Loss: 9209014.24609375, Actor Loss: -184089.439453125
Episode 8682: Time: 0.19419288635253906, Total Reward: 109.76429298282706, Q Loss: 3674021.8125, Actor Loss: -78794.126953125
Episode 8683: Time: 0.23883581161499023, Total Reward: 138.29961762350834, Q Loss: 5865620.9375, Actor Loss: -99076.62353515625
Episode 8684: Time: 0.5068337917327881, Total Reward: 304.70905496122555, Q Loss: 11979210.6328125, Actor Loss: -208342.271484375
Episode 8685: Time: 0.23890471458435059, Total Reward: 137.4527828511052, Q Loss: 5891644.203125, Actor Loss: -101816.8603515625
Episode 8686: Time: 0.7904238700866699, Total Reward: 481.3942306195215, Q Loss: 21549544.5546875, Actor Loss: -323106.47412109375
Episode 8687: Time: 0.46126890182495117, Total Reward: 277.39602057615934, Q Loss: 10934854.9296875, Actor Loss: -193122.3662109375
Episode 8688: Time: 0.26813387870788574, Total Reward: 156.35681494082183, Q Loss: 5755541.453125, Actor Loss: -110032.3525390625
Episode 8689: Time: 0.6094348430633545, Total Reward: 370.30943077128086, Q Loss: 12889787.3671875, Actor Loss: -247085.8525390625
Episode 8690: Time: 0.4164106845855713, Total Reward: 249.94547283147244, Q Loss: 9003343.421875, Actor Loss: -168509.97265625
Episode 8691: Time: 0.327747106552124, Total Reward: 191.36883938317632, Q Loss: 6311253.984375, Actor Loss: -135264.8935546875
Episode 8692: Time: 0.6685154438018799, Total Reward: 408.594140368854, Q Loss: 15150476.51953125, Actor Loss: -280451.00927734375
Episode 8693: Time: 0.17887115478515625, Total Reward: 100.60865470992752, Q Loss: 2857327.125, Actor Loss: -74430.10595703125
Episode 8694: Time: 0.19396591186523438, Total Reward: 109.95233614164395, Q Loss: 6023066.734375, Actor Loss: -82296.60546875
Episode 8695: Time: 0.446028470993042, Total Reward: 265.67738893708866, Q Loss: 10229740.1015625, Actor Loss: -185638.2158203125
Episode 8696: Time: 0.38671159744262695, Total Reward: 230.61802397761784, Q Loss: 7537925.0546875, Actor Loss: -159528.9921875
Episode 8697: Time: 0.4310271739959717, Total Reward: 259.35482634569337, Q Loss: 12217518.3125, Actor Loss: -180975.68359375
Episode 8698: Time: 0.2084798812866211, Total Reward: 118.75154495484426, Q Loss: 6447916.484375, Actor Loss: -85374.09228515625
Episode 8699: Time: 0.49106431007385254, Total Reward: 295.24273323857994, Q Loss: 11696379.140625, Actor Loss: -200350.59765625
Validation Mean: 9352.48251692884, Validation Std: 0.6713344703315801
saving model
Episode 8700: Time: 0.4040200710296631, Total Reward: 239.29377196183688, Q Loss: 10049172.140625, Actor Loss: -173174.33984375
Episode 8701: Time: 0.43244051933288574, Total Reward: 258.09682370329415, Q Loss: 11231586.4765625, Actor Loss: -181227.47412109375
Episode 8702: Time: 0.7438509464263916, Total Reward: 454.4987850287259, Q Loss: 16565945.69140625, Actor Loss: -318400.83251953125
Episode 8703: Time: 0.43230128288269043, Total Reward: 257.14131102992656, Q Loss: 11047880.2890625, Actor Loss: -181464.83056640625
Episode 8704: Time: 0.13427448272705078, Total Reward: 72.2855784782298, Q Loss: 2675206.28125, Actor Loss: -54717.443359375

Episode 8705: Time: 0.20891022682189941, Total Reward: 119.04327958693904, Q Loss: 5782130.96875, Actor Loss: -86105.55615234375
Episode 8706: Time: 0.4613828659057617, Total Reward: 277.20794798698387, Q Loss: 8898928.8671875, Actor Loss: -199900.81396484375
Episode 8707: Time: 0.19361495971679688, Total Reward: 109.92521786409051, Q Loss: 5145404.9453125, Actor Loss: -81762.87109375
Episode 8708: Time: 1.173079490661621, Total Reward: 723.0537844009585, Q Loss: 25770041.0234375, Actor Loss: -505264.1826171875
Episode 8709: Time: 0.6246623992919922, Total Reward: 379.6832310942219, Q Loss: 15240479.69140625, Actor Loss: -258515.23046875
Episode 8710: Time: 0.11957573890686035, Total Reward: 62.65588061231231, Q Loss: 3145814.1953125, Actor Loss: -49418.0673828125
Episode 8711: Time: 0.23860836029052734, Total Reward: 136.8141545072923, Q Loss: 6862261.0703125, Actor Loss: -105559.6455078125
Episode 8712: Time: 0.13398456573486328, Total Reward: 72.23638226952976, Q Loss: 2845698.375, Actor Loss: -59198.02685546875
Episode 8713: Time: 0.4620344638824463, Total Reward: 275.77688234307226, Q Loss: 11232821.1171875, Actor Loss: -192689.5703125
Episode 8714: Time: 0.4921731948852539, Total Reward: 295.77483405888705, Q Loss: 12464236.0, Actor Loss: -205312.4169921875
Episode 8715: Time: 0.4176914691925049, Total Reward: 249.0393329156303, Q Loss: 9708847.234375, Actor Loss: -179162.7255859375
Episode 8716: Time: 0.6696109771728516, Total Reward: 405.6538519507124, Q Loss: 15407023.19921875, Actor Loss: -277693.26708984375
Episode 8717: Time: 0.7447590827941895, Total Reward: 453.38330689647324, Q Loss: 19364700.0078125, Actor Loss: -311903.04345703125
Episode 8718: Time: 0.7134842872619629, Total Reward: 435.1217778603955, Q Loss: 16213677.8984375, Actor Loss: -301257.65234375
Episode 8719: Time: 0.14896941184997559, Total Reward: 81.73088172643642, Q Loss: 3654944.78125, Actor Loss: -61994.65673828125
Episode 8720: Time: 0.5944983959197998, Total Reward: 358.7048414716748, Q Loss: 16823801.6328125, Actor Loss: -254109.6318359375
Episode 8721: Time: 0.7728981971740723, Total Reward: 473.7852493908336, Q Loss: 19395257.4296875, Actor Loss: -328729.208984375
Episode 8722: Time: 0.16411876678466797, Total Reward: 91.38300675613847, Q Loss: 4554283.515625, Actor Loss: -72633.41455078125
Episode 8723: Time: 0.4615614414215088, Total Reward: 277.78339823859466, Q Loss: 12144070.59375, Actor Loss: -194021.44970703125
Episode 8724: Time: 0.40187716484069824, Total Reward: 237.50015344663916, Q Loss: 9621330.9609375, Actor Loss: -168764.0556640625
Episode 8725: Time: 0.5355162620544434, Total Reward: 322.5627258430065, Q Loss: 13008071.8125, Actor Loss: -225787.73779296875
Episode 8726: Time: 0.44652843475341797, Total Reward: 268.2040129341, Q Loss: 10511703.9453125, Actor Loss: -185277.45947265625
Episode 8727: Time: 0.6992781162261963, Total Reward: 426.6352486144325, Q Loss: 18107485.0703125, Actor Loss: -297335.37841796875
Episode 8728: Time: 0.20867037773132324, Total Reward: 119.63843401512784, Q Loss: 4320859.6875, Actor Loss: -92135.08154296875
Episode 8729: Time: 0.41623497009277344, Total Reward: 249.75041828004245, Q Loss: 11837110.828125, Actor Loss: -174519.923828125
Episode 8730: Time: 0.5947110652923584, Total Reward: 361.3577405199427, Q Loss: 14684692.40625, Actor Loss: -250452.78564453125
Episode 8731: Time: 0.7582390308380127, Total Reward: 463.57511432584505, Q Loss: 21012055.1171875, Actor Loss: -324825.626953125
Episode 8732: Time: 0.38715696334838867, Total Reward: 227.44848275208125, Q Loss: 7679335.96875, Actor Loss: -165366.15087890625

Episode 8733: Time: 0.2087564468383789, Total Reward: 118.98856267165797, Q Loss: 3508795.9765625, Actor Loss: -84376.8564453125
Episode 8734: Time: 0.22336363792419434, Total Reward: 127.97396090954554, Q Loss: 6959900.8203125, Actor Loss: -92316.1357421875
Episode 8735: Time: 0.3723742961883545, Total Reward: 221.78287682895342, Q Loss: 10230646.2734375, Actor Loss: -153035.80224609375
Episode 8736: Time: 0.2088325023651123, Total Reward: 118.50630836454005, Q Loss: 6215381.1484375, Actor Loss: -86072.6552734375
Episode 8737: Time: 0.9210739135742188, Total Reward: 566.0904311777242, Q Loss: 24771315.1953125, Actor Loss: -388974.99365234375
Episode 8738: Time: 0.4768974781036377, Total Reward: 286.6859791547811, Q Loss: 12114488.1484375, Actor Loss: -202457.6357421875
Episode 8739: Time: 0.639319896697998, Total Reward: 388.2264283158074, Q Loss: 18449781.25, Actor Loss: -272716.43212890625
Episode 8740: Time: 0.5205240249633789, Total Reward: 313.5325418533924, Q Loss: 14641300.7109375, Actor Loss: -218673.22119140625
Episode 8741: Time: 0.28290748596191406, Total Reward: 166.1393831183295, Q Loss: 6056981.046875, Actor Loss: -123768.1162109375
Episode 8742: Time: 0.282642126083374, Total Reward: 165.5712491799976, Q Loss: 6017069.5625, Actor Loss: -114816.06494140625
Episode 8743: Time: 0.5062644481658936, Total Reward: 305.5725215597738, Q Loss: 10954820.9375, Actor Loss: -210666.37109375
Episode 8744: Time: 0.6840126514434814, Total Reward: 417.67637560615896, Q Loss: 18190138.8828125, Actor Loss: -287072.8798828125
Episode 8745: Time: 0.846992015838623, Total Reward: 519.6530746668152, Q Loss: 20194529.4921875, Actor Loss: -359001.97705078125
Episode 8746: Time: 0.4763052463531494, Total Reward: 286.8802130527436, Q Loss: 12622633.859375, Actor Loss: -204998.6767578125
Episode 8747: Time: 1.1448616981506348, Total Reward: 704.0643987325216, Q Loss: 26563041.046875, Actor Loss: -493960.34521484375
Episode 8748: Time: 0.1788339614868164, Total Reward: 100.11192150571479, Q Loss: 5475465.015625, Actor Loss: -74701.65625
Episode 8749: Time: 0.20911169052124023, Total Reward: 119.1707108961999, Q Loss: 5553867.34375, Actor Loss: -88647.5693359375
Episode 8750: Time: 0.23868846893310547, Total Reward: 137.55476059175683, Q Loss: 6823805.96875, Actor Loss: -103923.04345703125
Episode 8751: Time: 0.22353577613830566, Total Reward: 128.5088258478075, Q Loss: 4615326.375, Actor Loss: -94322.07275390625
Episode 8752: Time: 0.5060365200042725, Total Reward: 304.8887491637535, Q Loss: 12384468.21875, Actor Loss: -215488.1220703125
Episode 8753: Time: 0.6245079040527344, Total Reward: 379.0228052906729, Q Loss: 15753410.40625, Actor Loss: -263577.7138671875
Episode 8754: Time: 0.5651736259460449, Total Reward: 340.8565460696421, Q Loss: 14857991.2265625, Actor Loss: -237874.33935546875
Episode 8755: Time: 0.312638521194458, Total Reward: 184.801351504354, Q Loss: 9166449.890625, Actor Loss: -131954.02294921875
Episode 8756: Time: 0.7726619243621826, Total Reward: 473.3661203952042, Q Loss: 20578985.515625, Actor Loss: -326989.96435546875
Episode 8757: Time: 0.9812793731689453, Total Reward: 601.1836099473181, Q Loss: 22977575.8203125, Actor Loss: -413941.17236328125
Episode 8758: Time: 0.46154022216796875, Total Reward: 275.4085337281225, Q Loss: 12085005.21875, Actor Loss: -197517.01220703125
Episode 8759: Time: 1.440979242324829, Total Reward: 893.4166568460528, Q Loss: 37362574.16796875, Actor Loss: -617707.2436523438
Episode 8760: Time: 0.3871347904205322, Total Reward: 230.24603274777823, Q Loss: 11802934.1796875, Actor Loss: -161493.33740234375

Episode 8761: Time: 0.610234260559082, Total Reward: 370.42612446883413, Q Loss: 18369071.3046875, Actor Loss: -259102.93017578125
Episode 8762: Time: 0.35742998123168945, Total Reward: 211.09228702303545, Q Loss: 9871615.625, Actor Loss: -155809.7841796875
Episode 8763: Time: 0.4314844608306885, Total Reward: 259.65035014750765, Q Loss: 9799622.40625, Actor Loss: -189061.4208984375
Episode 8764: Time: 0.1790761947631836, Total Reward: 100.09834609034888, Q Loss: 3846218.5625, Actor Loss: -78863.08251953125
Episode 8765: Time: 0.3726673126220703, Total Reward: 221.68665599801807, Q Loss: 7872896.8359375, Actor Loss: -160229.33740234375
Episode 8766: Time: 0.2533071041107178, Total Reward: 146.80708505542552, Q Loss: 6055189.84375, Actor Loss: -108446.6083984375
Episode 8767: Time: 0.6844205856323242, Total Reward: 417.77942941128765, Q Loss: 18543691.8125, Actor Loss: -292379.28369140625
Episode 8768: Time: 0.5208697319030762, Total Reward: 313.68840242352604, Q Loss: 14724903.859375, Actor Loss: -216146.20166015625
Episode 8769: Time: 0.22356891632080078, Total Reward: 127.77226620343451, Q Loss: 5188449.5546875, Actor Loss: -95933.89697265625
Episode 8770: Time: 0.25331735610961914, Total Reward: 147.50031263443285, Q Loss: 6664540.1796875, Actor Loss: -107378.7392578125
Episode 8771: Time: 0.34299755096435547, Total Reward: 202.06298150813726, Q Loss: 9762426.5859375, Actor Loss: -146389.650390625
Episode 8772: Time: 0.41686153411865234, Total Reward: 248.57951115739993, Q Loss: 10845567.296875, Actor Loss: -176385.005859375
Episode 8773: Time: 0.25357818603515625, Total Reward: 147.03724851556663, Q Loss: 8010320.734375, Actor Loss: -111387.09716796875
Episode 8774: Time: 0.13434123992919922, Total Reward: 72.49899866926582, Q Loss: 2633633.3671875, Actor Loss: -56427.64501953125
Episode 8775: Time: 0.2983589172363281, Total Reward: 173.39823657968947, Q Loss: 5979908.984375, Actor Loss: -129784.138671875
Episode 8776: Time: 0.5803937911987305, Total Reward: 350.41424879869504, Q Loss: 15839476.625, Actor Loss: -246569.4658203125
Episode 8777: Time: 0.19373178482055664, Total Reward: 110.08790317737086, Q Loss: 4744797.796875, Actor Loss: -85430.06591796875
Episode 8778: Time: 0.28490543365478516, Total Reward: 164.45790844332245, Q Loss: 6353475.46875, Actor Loss: -122147.169921875
Episode 8779: Time: 0.4182100296020508, Total Reward: 248.7892153228608, Q Loss: 12098336.7734375, Actor Loss: -177275.81787109375
Episode 8780: Time: 0.20939946174621582, Total Reward: 118.98312547683435, Q Loss: 4726045.65625, Actor Loss: -86460.50732421875
Episode 8781: Time: 0.40297865867614746, Total Reward: 239.25625841549157, Q Loss: 10374655.2890625, Actor Loss: -175080.48046875
Episode 8782: Time: 0.28370022773742676, Total Reward: 165.952713250322, Q Loss: 7278401.109375, Actor Loss: -126154.9453125
Episode 8783: Time: 0.22380828857421875, Total Reward: 128.81370335360765, Q Loss: 5862466.4140625, Actor Loss: -91613.3359375
Episode 8784: Time: 0.22403860092163086, Total Reward: 128.58568838383192, Q Loss: 5692468.265625, Actor Loss: -97190.1220703125
Episode 8785: Time: 1.2497589588165283, Total Reward: 770.1878630354913, Q Loss: 32759942.078125, Actor Loss: -528588.3125
Episode 8786: Time: 0.7433218955993652, Total Reward: 454.9565659193816, Q Loss: 19658927.5625, Actor Loss: -316358.25732421875
Episode 8787: Time: 0.2090158462524414, Total Reward: 118.75255499576487, Q Loss: 4831323.6328125, Actor Loss: -90371.4345703125
Episode 8788: Time: 0.4320218563079834, Total Reward: 257.9587398698706, Q Loss: 10596849.515625, Actor Loss: -186299.28955078125

Episode 8789: Time: 0.13430070877075195, Total Reward: 73.03691452403638, Q Loss: 3812804.078125, Actor Loss: -57823.9560546875
Episode 8790: Time: 0.579918384552002, Total Reward: 351.798238258721, Q Loss: 15804928.625, Actor Loss: -253505.9580078125
Episode 8791: Time: 0.13422393798828125, Total Reward: 72.70766855723001, Q Loss: 2824637.671875, Actor Loss: -57593.05517578125
Episode 8792: Time: 0.4906880855560303, Total Reward: 296.80479627613346, Q Loss: 11696975.7421875, Actor Loss: -212000.861328125
Episode 8793: Time: 0.5795996189117432, Total Reward: 352.21734434836765, Q Loss: 14154139.8515625, Actor Loss: -249490.60498046875
Episode 8794: Time: 0.5214176177978516, Total Reward: 313.5016002690045, Q Loss: 11857102.78125, Actor Loss: -223363.2236328125
Episode 8795: Time: 0.19364380836486816, Total Reward: 109.37538839995509, Q Loss: 8071307.828125, Actor Loss: -82619.28857421875
Episode 8796: Time: 0.17917823791503906, Total Reward: 100.54064948920558, Q Loss: 5265923.0625, Actor Loss: -76961.4111328125
Episode 8797: Time: 0.728482723236084, Total Reward: 445.13360504926806, Q Loss: 17617563.3203125, Actor Loss: -314755.81494140625
Episode 8798: Time: 0.6700923442840576, Total Reward: 407.69003226151165, Q Loss: 16989457.296875, Actor Loss: -293131.6298828125
Episode 8799: Time: 0.38767361640930176, Total Reward: 230.78866576104556, Q Loss: 11734107.8359375, Actor Loss: -169368.41015625
Validation Mean: 9352.164847971222, Validation Std: 0.5933030573378533
saving model
Episode 8800: Time: 0.8895249366760254, Total Reward: 519.2142305068015, Q Loss: 21446824.78125, Actor Loss: -364245.1826171875
Episode 8801: Time: 0.3901698589324951, Total Reward: 229.70619822455865, Q Loss: 9994554.4609375, Actor Loss: -169268.640625
Episode 8802: Time: 0.47736263275146484, Total Reward: 285.47916237430496, Q Loss: 12033821.9140625, Actor Loss: -208728.29931640625
Episode 8803: Time: 0.5214130878448486, Total Reward: 313.8037158388048, Q Loss: 13982471.625, Actor Loss: -227718.16357421875
Episode 8804: Time: 0.32777976989746094, Total Reward: 193.91088121301308, Q Loss: 8144907.0859375, Actor Loss: -141010.86279296875
Episode 8805: Time: 0.5802850723266602, Total Reward: 351.87534978790796, Q Loss: 17632555.8515625, Actor Loss: -252056.8076171875
Episode 8806: Time: 0.2533111572265625, Total Reward: 147.43363458008048, Q Loss: 5264784.546875, Actor Loss: -110658.080078125
Episode 8807: Time: 0.16428089141845703, Total Reward: 91.16217792774492, Q Loss: 4593219.671875, Actor Loss: -69686.3193359375
Episode 8808: Time: 0.15041279792785645, Total Reward: 80.86795241437012, Q Loss: 3480652.71875, Actor Loss: -63327.541015625
Episode 8809: Time: 0.37322282791137695, Total Reward: 220.0844578436723, Q Loss: 8157315.90625, Actor Loss: -162180.90771484375
Episode 8810: Time: 0.29872608184814453, Total Reward: 175.7734833925606, Q Loss: 6452998.734375, Actor Loss: -130586.87890625
Episode 8811: Time: 0.8347997665405273, Total Reward: 507.22608540419986, Q Loss: 24316531.703125, Actor Loss: -363090.9208984375
Episode 8812: Time: 0.6850879192352295, Total Reward: 417.51578633587735, Q Loss: 18672321.03125, Actor Loss: -298464.85009765625
Episode 8813: Time: 0.342944860458374, Total Reward: 202.72985379027614, Q Loss: 10336872.625, Actor Loss: -143183.62353515625
Episode 8814: Time: 0.49105405807495117, Total Reward: 295.75906605370807, Q Loss: 10803358.9765625, Actor Loss: -209896.41674804688
Episode 8815: Time: 0.31305456161499023, Total Reward: 184.88853663301475, Q Loss: 7911042.359375, Actor Loss: -133865.76123046875

Episode 8816: Time: 0.4909372329711914, Total Reward: 295.2517981682884, Q Loss: 12263189.96875, Actor Loss: -213988.02490234375
Episode 8817: Time: 0.35797595977783203, Total Reward: 212.1648607178127, Q Loss: 8625217.90625, Actor Loss: -153428.05126953125
Episode 8818: Time: 0.16394257545471191, Total Reward: 90.48756767581588, Q Loss: 3916215.0859375, Actor Loss: -70079.40185546875
Episode 8819: Time: 0.5515151023864746, Total Reward: 332.09692662455046, Q Loss: 15332398.0625, Actor Loss: -237097.9033203125
Episode 8820: Time: 0.5216200351715088, Total Reward: 314.6395837845489, Q Loss: 16515830.984375, Actor Loss: -229248.1923828125
Episode 8821: Time: 0.4173891544342041, Total Reward: 247.56221079331226, Q Loss: 11116405.03125, Actor Loss: -180839.18115234375
Episode 8822: Time: 0.597130298614502, Total Reward: 357.4415684046464, Q Loss: 15991392.1328125, Actor Loss: -262839.25830078125
Episode 8823: Time: 0.38791394233703613, Total Reward: 230.53316393176925, Q Loss: 10640227.921875, Actor Loss: -166404.55029296875
Episode 8824: Time: 0.521425724029541, Total Reward: 314.59216280373505, Q Loss: 16956070.96875, Actor Loss: -225314.02294921875
Episode 8825: Time: 0.35883522033691406, Total Reward: 210.29422296083015, Q Loss: 9949486.265625, Actor Loss: -155930.4501953125
Episode 8826: Time: 0.08979225158691406, Total Reward: 44.615826958828904, Q Loss: 2792775.484375, Actor Loss: -37907.46826171875
Episode 8827: Time: 0.8785183429718018, Total Reward: 537.6909756585163, Q Loss: 21582544.3046875, Actor Loss: -390547.9873046875
Episode 8828: Time: 0.8032994270324707, Total Reward: 490.1197058144085, Q Loss: 18470229.3984375, Actor Loss: -344229.18994140625
Episode 8829: Time: 0.22393345832824707, Total Reward: 128.11084486577846, Q Loss: 5698167.1875, Actor Loss: -97725.46923828125
Episode 8830: Time: 0.13448715209960938, Total Reward: 72.16656745603815, Q Loss: 3663970.78125, Actor Loss: -57386.162109375
Episode 8831: Time: 0.3573122024536133, Total Reward: 210.81403196700006, Q Loss: 6811329.484375, Actor Loss: -158973.76708984375
Episode 8832: Time: 0.5068438053131104, Total Reward: 303.8077774538951, Q Loss: 11204121.5, Actor Loss: -225709.09033203125
Episode 8833: Time: 0.685002326965332, Total Reward: 416.3352537029826, Q Loss: 18592295.0, Actor Loss: -295242.41552734375
Episode 8834: Time: 0.3881411552429199, Total Reward: 230.84717673411595, Q Loss: 10533535.421875, Actor Loss: -170825.1337890625
Episode 8835: Time: 0.17917299270629883, Total Reward: 100.38814255171302, Q Loss: 3643008.671875, Actor Loss: -80137.4951171875
Episode 8836: Time: 0.35822582244873047, Total Reward: 211.56223649959895, Q Loss: 8629670.96875, Actor Loss: -158999.3623046875
Episode 8837: Time: 0.10447049140930176, Total Reward: 53.7127452555402, Q Loss: 3120423.6875, Actor Loss: -44533.92236328125
Episode 8838: Time: 0.520958423614502, Total Reward: 314.4649885256968, Q Loss: 14814352.53125, Actor Loss: -227073.103515625
Episode 8839: Time: 0.40207862854003906, Total Reward: 238.4251174399216, Q Loss: 10550971.78125, Actor Loss: -179559.61962890625
Episode 8840: Time: 0.4612386226654053, Total Reward: 277.8704967621309, Q Loss: 12325669.234375, Actor Loss: -202565.3525390625
Episode 8841: Time: 0.31267786026000977, Total Reward: 184.5877744353283, Q Loss: 8345577.015625, Actor Loss: -136249.341796875
Episode 8842: Time: 0.2083587646484375, Total Reward: 118.78900467134036, Q Loss: 6636174.109375, Actor Loss: -88932.6748046875
Episode 8843: Time: 0.32846641540527344, Total Reward: 191.29273797446314, Q Loss: 8347961.3984375, Actor Loss: -144695.44677734375

Episode 8844: Time: 0.3282456398010254, Total Reward: 192.82270411130804, Q Loss: 7380871.90625, Actor Loss: -144530.52880859375
Episode 8845: Time: 0.8630187511444092, Total Reward: 527.8228943287912, Q Loss: 25342867.359375, Actor Loss: -387012.568359375
Episode 8846: Time: 0.3283040523529053, Total Reward: 193.20522872088418, Q Loss: 12155832.84375, Actor Loss: -141591.642578125
Episode 8847: Time: 0.46085143089294434, Total Reward: 276.069932545132, Q Loss: 11033918.8359375, Actor Loss: -209041.9287109375
Episode 8848: Time: 0.3283700942993164, Total Reward: 193.56158217501797, Q Loss: 10389466.796875, Actor Loss: -146733.02587890625
Episode 8849: Time: 1.0102226734161377, Total Reward: 621.333644979101, Q Loss: 28874040.2265625, Actor Loss: -448836.2080078125
Episode 8850: Time: 0.2830312252044678, Total Reward: 165.5818417253504, Q Loss: 6524952.25, Actor Loss: -125293.38232421875
Episode 8851: Time: 0.17890071868896484, Total Reward: 100.22293344959832, Q Loss: 6203341.375, Actor Loss: -80450.947265625
Episode 8852: Time: 0.28306055068969727, Total Reward: 165.59588001231813, Q Loss: 6996308.65625, Actor Loss: -121425.52685546875
Episode 8853: Time: 0.25392603874206543, Total Reward: 146.9058144397802, Q Loss: 5494086.125, Actor Loss: -114918.90576171875
Episode 8854: Time: 0.25345540046691895, Total Reward: 147.5553804106894, Q Loss: 6462081.8359375, Actor Loss: -117026.19677734375
Episode 8855: Time: 0.2684159278869629, Total Reward: 154.88478707326652, Q Loss: 5971351.171875, Actor Loss: -116617.00146484375
Episode 8856: Time: 0.7582828998565674, Total Reward: 463.8183873142907, Q Loss: 20825940.3046875, Actor Loss: -340788.44287109375
Episode 8857: Time: 0.19364547729492188, Total Reward: 108.58282652637543, Q Loss: 5286848.234375, Actor Loss: -87202.79150390625
Episode 8858: Time: 0.5952243804931641, Total Reward: 360.17445595861767, Q Loss: 18077764.1015625, Actor Loss: -264113.26904296875
Episode 8859: Time: 0.8007628917694092, Total Reward: 491.17040188348193, Q Loss: 21685298.6171875, Actor Loss: -351190.25048828125
Episode 8860: Time: 0.1338789463043213, Total Reward: 72.57001282467532, Q Loss: 2844461.890625, Actor Loss: -63285.87841796875
Episode 8861: Time: 0.43062591552734375, Total Reward: 259.0505742195153, Q Loss: 9320075.125, Actor Loss: -188991.61474609375
Episode 8862: Time: 0.5798532962799072, Total Reward: 350.3630183470322, Q Loss: 13757699.9140625, Actor Loss: -259925.751953125
Episode 8863: Time: 0.5055510997772217, Total Reward: 304.6793581815251, Q Loss: 15709968.703125, Actor Loss: -225556.01806640625
Episode 8864: Time: 0.727912187576294, Total Reward: 445.2176973110788, Q Loss: 17694874.21875, Actor Loss: -327394.85498046875
Episode 8865: Time: 0.6091883182525635, Total Reward: 368.77061621426, Q Loss: 16564412.625, Actor Loss: -273781.7578125
Episode 8866: Time: 0.3274650573730469, Total Reward: 192.8726197325408, Q Loss: 8157511.7109375, Actor Loss: -148031.61962890625
Episode 8867: Time: 0.6832308769226074, Total Reward: 415.70638516967375, Q Loss: 15889588.1640625, Actor Loss: -307569.23681640625
Episode 8868: Time: 0.3717179298400879, Total Reward: 220.55486608784483, Q Loss: 9524689.96875, Actor Loss: -162485.98486328125
Episode 8869: Time: 0.5655076503753662, Total Reward: 342.5312142718629, Q Loss: 14272730.1875, Actor Loss: -253362.54345703125
Episode 8870: Time: 0.5212650299072266, Total Reward: 313.9793440397122, Q Loss: 12904571.40625, Actor Loss: -235465.3466796875
Episode 8871: Time: 0.4756753444671631, Total Reward: 286.90928849346625, Q Loss: 14391009.6953125, Actor Loss: -210558.94482421875

Episode 8872: Time: 0.35718846321105957, Total Reward: 211.83049066568358, Q Loss: 7930740.21875, Actor Loss: -158028.4521484375
Episode 8873: Time: 0.3870689868927002, Total Reward: 230.9400329758389, Q Loss: 11409421.3984375, Actor Loss: -172109.673828125
Episode 8874: Time: 0.8765828609466553, Total Reward: 538.2664798915102, Q Loss: 26117726.3125, Actor Loss: -396868.087890625
Episode 8875: Time: 0.37156081199645996, Total Reward: 219.82254152132398, Q Loss: 10172096.2890625, Actor Loss: -169648.09814453125
Episode 8876: Time: 0.4913358688354492, Total Reward: 295.59023539006824, Q Loss: 15065823.859375, Actor Loss: -221294.77685546875
Episode 8877: Time: 0.44593000411987305, Total Reward: 264.91837151225326, Q Loss: 11510642.4375, Actor Loss: -197359.69482421875
Episode 8878: Time: 0.610335111618042, Total Reward: 368.65597325934806, Q Loss: 13760106.7578125, Actor Loss: -275451.08642578125
Episode 8879: Time: 1.482823371887207, Total Reward: 919.8137555801459, Q Loss: 39049607.546875, Actor Loss: -661046.0947265625
Episode 8880: Time: 0.4465951919555664, Total Reward: 267.63486908201554, Q Loss: 13167068.09375, Actor Loss: -199233.72607421875
Episode 8881: Time: 0.3716545104980469, Total Reward: 221.27902447950743, Q Loss: 12181934.28125, Actor Loss: -166766.6787109375
Episode 8882: Time: 0.38678789138793945, Total Reward: 230.86603440724002, Q Loss: 10796822.8671875, Actor Loss: -174754.26513671875
Episode 8883: Time: 0.6088430881500244, Total Reward: 369.2028936497754, Q Loss: 19243942.65625, Actor Loss: -275589.62841796875
Episode 8884: Time: 0.757340669631958, Total Reward: 464.06064797305436, Q Loss: 21052117.4453125, Actor Loss: -338993.9130859375
Episode 8885: Time: 1.1717212200164795, Total Reward: 724.4758910385431, Q Loss: 31800907.171875, Actor Loss: -515988.73046875
Episode 8886: Time: 1.4523160457611084, Total Reward: 901.0500801057626, Q Loss: 43529672.9453125, Actor Loss: -657795.2319335938
Episode 8887: Time: 0.5343642234802246, Total Reward: 324.6413988590255, Q Loss: 13710983.234375, Actor Loss: -240253.8271484375
Episode 8888: Time: 0.5639126300811768, Total Reward: 343.0636695659041, Q Loss: 15406466.34375, Actor Loss: -260385.5703125
Episode 8889: Time: 1.0668549537658691, Total Reward: 657.9979331527112, Q Loss: 30194873.7265625, Actor Loss: -476163.41064453125
Episode 8890: Time: 0.14866232872009277, Total Reward: 82.17366842520009, Q Loss: 3740450.1953125, Actor Loss: -64951.93505859375
Episode 8891: Time: 0.3271193504333496, Total Reward: 193.5606127184849, Q Loss: 9950933.734375, Actor Loss: -148101.2861328125
Episode 8892: Time: 0.31305742263793945, Total Reward: 184.66328492142813, Q Loss: 8621418.921875, Actor Loss: -136336.1904296875
Episode 8893: Time: 0.40159130096435547, Total Reward: 239.89510720191402, Q Loss: 11094832.671875, Actor Loss: -178920.48486328125
Episode 8894: Time: 0.2829732894897461, Total Reward: 165.31443763834682, Q Loss: 6545276.3125, Actor Loss: -129422.615234375
Episode 8895: Time: 0.5500342845916748, Total Reward: 333.8096435656832, Q Loss: 16849898.1015625, Actor Loss: -244698.75146484375
Episode 8896: Time: 0.5645656585693359, Total Reward: 341.8753415061522, Q Loss: 16683036.0078125, Actor Loss: -259535.8828125
Episode 8897: Time: 0.5495996475219727, Total Reward: 333.81159070624716, Q Loss: 15768724.0625, Actor Loss: -243815.23291015625
Episode 8898: Time: 0.3564310073852539, Total Reward: 211.80359744559524, Q Loss: 9427061.0, Actor Loss: -162059.0068359375
Episode 8899: Time: 0.35636115074157715, Total Reward: 212.67782304062075, Q Loss: 9868888.28125, Actor Loss: -161951.95947265625

Validation Mean: 9352.672399383267, Validation Std: 0.8884756114659635
saving model
Episode 8900: Time: 0.4478645324707031, Total Reward: 267.1837749987649, Q Loss: 13690501.2578125, Actor Loss: -204342.89404296875
Episode 8901: Time: 0.5343492031097412, Total Reward: 324.2447315858738, Q Loss: 14743745.4296875, Actor Loss: -240239.9990234375
Episode 8902: Time: 1.0383410453796387, Total Reward: 639.7408977228234, Q Loss: 32482835.1796875, Actor Loss: -476670.09716796875
Episode 8903: Time: 0.4311976432800293, Total Reward: 257.7442884318353, Q Loss: 11748623.796875, Actor Loss: -195013.705078125
Episode 8904: Time: 0.14865970611572266, Total Reward: 81.94181207833546, Q Loss: 5736961.09375, Actor Loss: -64485.34912109375
Episode 8905: Time: 0.5649111270904541, Total Reward: 342.0161673448145, Q Loss: 17747123.4375, Actor Loss: -258810.45166015625
Episode 8906: Time: 0.5931851863861084, Total Reward: 359.44810610890187, Q Loss: 17391521.296875, Actor Loss: -266943.40869140625
Episode 8907: Time: 0.2827413082122803, Total Reward: 166.1014880889218, Q Loss: 7706644.71875, Actor Loss: -125292.681640625
Episode 8908: Time: 0.6381978988647461, Total Reward: 388.1629912875792, Q Loss: 16976620.859375, Actor Loss: -288375.99365234375
Episode 8909: Time: 0.771930456161499, Total Reward: 471.8234151543079, Q Loss: 23790675.109375, Actor Loss: -359348.99462890625
Episode 8910: Time: 0.3722820281982422, Total Reward: 220.79282957323593, Q Loss: 12000146.125, Actor Loss: -168729.91259765625
Episode 8911: Time: 0.5051479339599609, Total Reward: 305.3680556706738, Q Loss: 14008682.0, Actor Loss: -226615.619140625
Episode 8912: Time: 0.7135069370269775, Total Reward: 434.65349959888647, Q Loss: 20915147.203125, Actor Loss: -328704.2138671875
Episode 8913: Time: 0.22352814674377441, Total Reward: 128.88165491530734, Q Loss: 7012463.6015625, Actor Loss: -102638.546875
Episode 8914: Time: 0.43091344833374023, Total Reward: 258.52365835857495, Q Loss: 12249437.78125, Actor Loss: -195685.69873046875
Episode 8915: Time: 1.024214744567871, Total Reward: 631.6560065315771, Q Loss: 28000445.2265625, Actor Loss: -480325.30029296875
Episode 8916: Time: 0.2530643939971924, Total Reward: 147.46808002282742, Q Loss: 5435939.109375, Actor Loss: -116021.3408203125
Episode 8917: Time: 0.4609084129333496, Total Reward: 276.738842681182, Q Loss: 12945328.421875, Actor Loss: -204689.0576171875
Episode 8918: Time: 0.4011037349700928, Total Reward: 236.58858115572286, Q Loss: 10929475.34375, Actor Loss: -184657.82177734375
Episode 8919: Time: 0.26770567893981934, Total Reward: 155.89447270256707, Q Loss: 8011529.046875, Actor Loss: -122950.01953125
Episode 8920: Time: 0.3568739891052246, Total Reward: 212.73680030996357, Q Loss: 10744835.9453125, Actor Loss: -160437.541015625
Episode 8921: Time: 0.7431488037109375, Total Reward: 454.9570633282654, Q Loss: 23720383.953125, Actor Loss: -346743.12841796875
Episode 8922: Time: 0.28241729736328125, Total Reward: 165.4531058041661, Q Loss: 8743173.84375, Actor Loss: -127454.77734375
Episode 8923: Time: 0.8758068084716797, Total Reward: 536.5735048735635, Q Loss: 24510495.3125, Actor Loss: -394911.90283203125
Episode 8924: Time: 0.19295358657836914, Total Reward: 109.76602060699999, Q Loss: 5233713.359375, Actor Loss: -89500.50390625
Episode 8925: Time: 0.13404297828674316, Total Reward: 72.17124226421313, Q Loss: 6028088.53125, Actor Loss: -60865.908203125
Episode 8926: Time: 0.4905421733856201, Total Reward: 291.9036323984162, Q Loss: 13814306.875, Actor Loss: -229577.2470703125

Episode 8927: Time: 0.6385166645050049, Total Reward: 389.2959336447569, Q Loss: 17684021.328125, Actor Loss: -295316.77685546875
Episode 8928: Time: 0.5943427085876465, Total Reward: 361.12619534111326, Q Loss: 17020178.65625, Actor Loss: -273244.67919921875
Episode 8929: Time: 0.20844721794128418, Total Reward: 119.42116695346762, Q Loss: 5733648.671875, Actor Loss: -98128.90185546875
Episode 8930: Time: 1.082719326019287, Total Reward: 669.118998157091, Q Loss: 30444403.5390625, Actor Loss: -497110.5439453125
Episode 8931: Time: 0.35726284980773926, Total Reward: 211.01065140219632, Q Loss: 9544491.0546875, Actor Loss: -165613.71826171875
Episode 8932: Time: 0.5194170475006104, Total Reward: 315.3222187342066, Q Loss: 14067822.8828125, Actor Loss: -238969.533203125
Episode 8933: Time: 0.4155590534210205, Total Reward: 249.12407776721116, Q Loss: 13958056.015625, Actor Loss: -194121.79296875
Episode 8934: Time: 0.45975232124328613, Total Reward: 275.98652942182963, Q Loss: 13429261.90625, Actor Loss: -209718.85595703125
Episode 8935: Time: 0.6236453056335449, Total Reward: 378.7436513245762, Q Loss: 16347782.40625, Actor Loss: -284439.447265625
Episode 8936: Time: 0.134385347366333, Total Reward: 71.92619287891249, Q Loss: 3516127.421875, Actor Loss: -62077.033203125
Episode 8937: Time: 0.2675168514251709, Total Reward: 155.6907557793329, Q Loss: 7574272.2265625, Actor Loss: -120826.7822265625
Episode 8938: Time: 1.0818052291870117, Total Reward: 667.6504683475565, Q Loss: 30480126.0546875, Actor Loss: -501902.64794921875
Episode 8939: Time: 0.2382216453552246, Total Reward: 137.77576495227171, Q Loss: 8891244.3125, Actor Loss: -108842.3486328125
Episode 8940: Time: 0.9938557147979736, Total Reward: 610.4808694128432, Q Loss: 26508075.6328125, Actor Loss: -457408.5888671875
Episode 8941: Time: 0.6533646583557129, Total Reward: 398.2628284379804, Q Loss: 19062673.1484375, Actor Loss: -308461.2333984375
Episode 8942: Time: 0.3563344478607178, Total Reward: 210.88982369800016, Q Loss: 10177380.9921875, Actor Loss: -160571.67333984375
Episode 8943: Time: 0.22350740432739258, Total Reward: 128.71044692353468, Q Loss: 7786795.640625, Actor Loss: -106295.6015625
Episode 8944: Time: 0.35660362243652344, Total Reward: 210.17954643244943, Q Loss: 11949190.953125, Actor Loss: -172110.9521484375
Episode 8945: Time: 0.19286537170410156, Total Reward: 109.66707273540531, Q Loss: 7802410.0625, Actor Loss: -89415.47900390625
Episode 8946: Time: 0.43019723892211914, Total Reward: 256.2175415610352, Q Loss: 12891273.3125, Actor Loss: -198652.6103515625
Episode 8947: Time: 0.16336798667907715, Total Reward: 90.54904834990086, Q Loss: 4831305.796875, Actor Loss: -73337.20751953125
Episode 8948: Time: 0.3267648220062256, Total Reward: 192.35744851795587, Q Loss: 7952197.6171875, Actor Loss: -148595.384765625
Episode 8949: Time: 0.23761582374572754, Total Reward: 138.44788520511094, Q Loss: 5959683.265625, Actor Loss: -107445.9091796875
Episode 8950: Time: 0.8747434616088867, Total Reward: 538.2672002393653, Q Loss: 24492885.40625, Actor Loss: -399161.25146484375
Episode 8951: Time: 0.29700255393981934, Total Reward: 173.7958655690743, Q Loss: 9356079.25, Actor Loss: -140962.1611328125
Episode 8952: Time: 0.44527149200439453, Total Reward: 268.1654992656155, Q Loss: 13629182.7421875, Actor Loss: -207786.619140625
Episode 8953: Time: 0.29849672317504883, Total Reward: 175.0981543988411, Q Loss: 9752234.0859375, Actor Loss: -133147.9443359375
Episode 8954: Time: 0.536463737487793, Total Reward: 323.62411054658, Q Loss: 12969101.2890625, Actor Loss: -248771.5419921875

Episode 8955: Time: 0.5051925182342529, Total Reward: 304.3612781098024, Q Loss: 18485592.75, Actor Loss: -235341.95263671875
Episode 8956: Time: 0.7123124599456787, Total Reward: 436.04734570810854, Q Loss: 17256812.15625, Actor Loss: -333812.9423828125
Episode 8957: Time: 0.17843365669250488, Total Reward: 99.24034976038728, Q Loss: 5839944.984375, Actor Loss: -83223.72802734375
Episode 8958: Time: 0.5046892166137695, Total Reward: 306.03038269883194, Q Loss: 14565903.0546875, Actor Loss: -231433.625
Episode 8959: Time: 0.3709385395050049, Total Reward: 221.18028608230074, Q Loss: 11964227.109375, Actor Loss: -165924.19921875
Episode 8960: Time: 1.0984113216400146, Total Reward: 677.870795446333, Q Loss: 31929857.421875, Actor Loss: -509902.01611328125
Episode 8961: Time: 0.5336647033691406, Total Reward: 323.6223011340295, Q Loss: 14301169.296875, Actor Loss: -246538.92626953125
Episode 8962: Time: 0.3417847156524658, Total Reward: 203.3698056467203, Q Loss: 8872768.109375, Actor Loss: -158069.07763671875
Episode 8963: Time: 0.5190143585205078, Total Reward: 314.5454340562836, Q Loss: 13054568.84375, Actor Loss: -237012.15625
Episode 8964: Time: 0.13381528854370117, Total Reward: 72.17980899185005, Q Loss: 3535384.4609375, Actor Loss: -62788.59716796875
Episode 8965: Time: 0.23799538612365723, Total Reward: 137.40344076524903, Q Loss: 6501137.8984375, Actor Loss: -109474.8037109375
Episode 8966: Time: 0.5777895450592041, Total Reward: 352.2307665134318, Q Loss: 14753800.328125, Actor Loss: -271670.20458984375
Episode 8967: Time: 0.17842340469360352, Total Reward: 100.45600269666451, Q Loss: 5332473.171875, Actor Loss: -83247.78759765625
Episode 8968: Time: 0.08968544006347656, Total Reward: 44.18536588245871, Q Loss: 2419071.8125, Actor Loss: -42897.4619140625
Episode 8969: Time: 0.5335903167724609, Total Reward: 322.80784921525674, Q Loss: 14672857.359375, Actor Loss: -251998.380859375
Episode 8970: Time: 0.4742429256439209, Total Reward: 287.2263967002671, Q Loss: 15150309.734375, Actor Loss: -218957.31298828125
Episode 8971: Time: 0.607158899307251, Total Reward: 371.2565079499258, Q Loss: 19314893.953125, Actor Loss: -291995.728515625
Episode 8972: Time: 0.4889092445373535, Total Reward: 294.04328732901416, Q Loss: 15836580.84375, Actor Loss: -231416.15625
Episode 8973: Time: 0.6075859069824219, Total Reward: 370.8875115398526, Q Loss: 19758181.71875, Actor Loss: -290740.90576171875
Episode 8974: Time: 0.4152262210845947, Total Reward: 249.26948259425578, Q Loss: 16243065.59375, Actor Loss: -194270.5517578125
Episode 8975: Time: 0.8748140335083008, Total Reward: 538.1446784232331, Q Loss: 30887348.375, Actor Loss: -413081.69287109375
Episode 8976: Time: 0.9939441680908203, Total Reward: 610.57831035622, Q Loss: 28047364.015625, Actor Loss: -471937.29833984375
Episode 8977: Time: 0.5345113277435303, Total Reward: 323.7044398748093, Q Loss: 17923271.015625, Actor Loss: -249097.6376953125
Episode 8978: Time: 0.37127685546875, Total Reward: 220.03451980045972, Q Loss: 11218741.6171875, Actor Loss: -174281.90380859375
Episode 8979: Time: 0.14850902557373047, Total Reward: 82.19085030556076, Q Loss: 4729442.75, Actor Loss: -70287.146484375
Episode 8980: Time: 0.6676647663116455, Total Reward: 407.90553556175377, Q Loss: 19339609.4375, Actor Loss: -317356.72900390625
Episode 8981: Time: 0.8300108909606934, Total Reward: 505.28774508177304, Q Loss: 24900395.640625, Actor Loss: -387354.39697265625
Episode 8982: Time: 0.28246402740478516, Total Reward: 165.48142910778338, Q Loss: 7539570.9375, Actor Loss: -128625.82373046875

Episode 8983: Time: 0.5203022956848145, Total Reward: 314.41737397000026, Q Loss: 16756114.234375, Actor Loss: -238477.69775390625
Episode 8984: Time: 0.19342327117919922, Total Reward: 109.53134232967663, Q Loss: 4518579.765625, Actor Loss: -90877.41796875
Episode 8985: Time: 0.25394272804260254, Total Reward: 147.39628224473006, Q Loss: 7547241.375, Actor Loss: -116774.55322265625
Episode 8986: Time: 0.6244804859161377, Total Reward: 379.6076540488643, Q Loss: 16089586.984375, Actor Loss: -295749.0341796875
Episode 8987: Time: 0.22345590591430664, Total Reward: 128.55845678413084, Q Loss: 6103594.65625, Actor Loss: -101990.25927734375
Episode 8988: Time: 0.490694522857666, Total Reward: 295.740424052934, Q Loss: 10540954.28125, Actor Loss: -230588.56884765625
Episode 8989: Time: 0.5504200458526611, Total Reward: 332.5311897927384, Q Loss: 15220129.46875, Actor Loss: -258224.93701171875
Episode 8990: Time: 0.41635608673095703, Total Reward: 250.21651670972417, Q Loss: 12060411.8203125, Actor Loss: -185617.20556640625
Episode 8991: Time: 0.17889976501464844, Total Reward: 100.94214836694758, Q Loss: 4247310.40625, Actor Loss: -84681.41748046875
Episode 8992: Time: 0.1344597339630127, Total Reward: 72.53556352496406, Q Loss: 4228673.1953125, Actor Loss: -63977.0341796875
Episode 8993: Time: 0.5943927764892578, Total Reward: 361.65834733730225, Q Loss: 17535172.15625, Actor Loss: -275847.1005859375
Episode 8994: Time: 0.35703587532043457, Total Reward: 212.0484380733433, Q Loss: 14394954.796875, Actor Loss: -167658.228515625
Episode 8995: Time: 0.14896440505981445, Total Reward: 81.83603094865362, Q Loss: 4414799.53125, Actor Loss: -74398.8125
Episode 8996: Time: 0.4754931926727295, Total Reward: 285.50459913913835, Q Loss: 11107192.71875, Actor Loss: -225809.78857421875
Episode 8997: Time: 0.5949304103851318, Total Reward: 359.2860816643063, Q Loss: 16721962.7734375, Actor Loss: -273947.298828125
Episode 8998: Time: 0.29814600944519043, Total Reward: 174.5452252707874, Q Loss: 9543385.78125, Actor Loss: -140362.357421875
Episode 8999: Time: 0.3126528263092041, Total Reward: 181.9934244139613, Q Loss: 9421817.96875, Actor Loss: -146045.419921875
Validation Mean: 9351.259053752567, Validation Std: 0.9889429892080216
saving model
Episode 9000: Time: 0.4039621353149414, Total Reward: 238.40556682423696, Q Loss: 11527943.5390625, Actor Loss: -185969.498046875
Episode 9001: Time: 0.28322529792785645, Total Reward: 164.8478074530486, Q Loss: 9378551.8828125, Actor Loss: -131384.5625
Episode 9002: Time: 0.5362520217895508, Total Reward: 323.4958327905555, Q Loss: 16494576.375, Actor Loss: -255665.97216796875
Episode 9003: Time: 0.5813567638397217, Total Reward: 351.3152185881395, Q Loss: 18414298.1171875, Actor Loss: -274464.70849609375
Episode 9004: Time: 0.6546826362609863, Total Reward: 396.9272206588176, Q Loss: 22484182.125, Actor Loss: -307706.185546875
Episode 9005: Time: 0.3282337188720703, Total Reward: 192.88921086977209, Q Loss: 10230771.875, Actor Loss: -154945.826171875
Episode 9006: Time: 0.6099305152893066, Total Reward: 371.2487170592243, Q Loss: 18238830.1875, Actor Loss: -287855.86474609375
Episode 9007: Time: 0.4018564224243164, Total Reward: 240.42034370001826, Q Loss: 13131415.578125, Actor Loss: -188513.55712890625
Episode 9008: Time: 0.4465057849884033, Total Reward: 267.99844809532453, Q Loss: 14518542.0546875, Actor Loss: -208759.15087890625
Episode 9009: Time: 0.19370341300964355, Total Reward: 109.82372687945806, Q Loss: 5733982.609375, Actor Loss: -89643.80712890625

Episode 9010: Time: 0.461810827255249, Total Reward: 273.91226384715657, Q Loss: 12954580.8515625, Actor Loss: -221379.87939453125
Episode 9011: Time: 0.6694700717926025, Total Reward: 406.39294044093253, Q Loss: 24238341.71875, Actor Loss: -319042.0263671875
Episode 9012: Time: 1.0858447551727295, Total Reward: 666.3046435811203, Q Loss: 35719839.7265625, Actor Loss: -508949.35009765625
Episode 9013: Time: 0.3580131530761719, Total Reward: 212.090670009816, Q Loss: 12597941.875, Actor Loss: -167016.54541015625
Episode 9014: Time: 0.4177730083465576, Total Reward: 247.75553327491997, Q Loss: 14045248.234375, Actor Loss: -193757.61376953125
Episode 9015: Time: 0.3423459529876709, Total Reward: 203.25512778349358, Q Loss: 15154553.5, Actor Loss: -157805.501953125
Episode 9016: Time: 0.5204777717590332, Total Reward: 315.0605316065797, Q Loss: 14987194.140625, Actor Loss: -253078.10791015625
Episode 9017: Time: 0.34224605560302734, Total Reward: 202.43205225966182, Q Loss: 10542901.984375, Actor Loss: -159138.93798828125
Episode 9018: Time: 0.35747504234313965, Total Reward: 212.0254300611002, Q Loss: 9767405.515625, Actor Loss: -172369.82177734375
Episode 9019: Time: 0.4311704635620117, Total Reward: 258.9091865909154, Q Loss: 13816661.3203125, Actor Loss: -208488.3466796875
Episode 9020: Time: 0.2380681037902832, Total Reward: 137.90270469309263, Q Loss: 5789678.3515625, Actor Loss: -112897.68994140625
Episode 9021: Time: 0.6229674816131592, Total Reward: 380.30929098713455, Q Loss: 17910010.296875, Actor Loss: -295393.875
Episode 9022: Time: 0.11905336380004883, Total Reward: 62.6212519226502, Q Loss: 3928957.28125, Actor Loss: -58652.7275390625
Episode 9023: Time: 0.4309227466583252, Total Reward: 256.9375361686312, Q Loss: 13061001.875, Actor Loss: -208297.45166015625
Episode 9024: Time: 1.1863443851470947, Total Reward: 733.935384355844, Q Loss: 35935392.890625, Actor Loss: -565538.0600585938
Episode 9025: Time: 0.3128795623779297, Total Reward: 184.50434596669766, Q Loss: 10082803.421875, Actor Loss: -147638.2412109375
Episode 9026: Time: 0.25316858291625977, Total Reward: 147.1648773910389, Q Loss: 9554437.6875, Actor Loss: -116620.271484375
Episode 9027: Time: 0.4615626335144043, Total Reward: 277.2858965715484, Q Loss: 12688255.359375, Actor Loss: -218364.36328125
Episode 9028: Time: 0.7738077640533447, Total Reward: 472.8798808418657, Q Loss: 21494733.4609375, Actor Loss: -361369.826171875
Episode 9029: Time: 0.6832239627838135, Total Reward: 417.5991833086007, Q Loss: 20830320.5, Actor Loss: -324392.1669921875
Episode 9030: Time: 0.6977777481079102, Total Reward: 426.3638701613842, Q Loss: 21409848.5859375, Actor Loss: -337607.06005859375
Episode 9031: Time: 1.0530362129211426, Total Reward: 650.1603151862486, Q Loss: 29212454.515625, Actor Loss: -503940.89697265625
Episode 9032: Time: 0.5045528411865234, Total Reward: 303.5910718467761, Q Loss: 12628447.015625, Actor Loss: -243701.947265625
Episode 9033: Time: 0.2231311798095703, Total Reward: 128.64786383012526, Q Loss: 7468061.734375, Actor Loss: -107105.7353515625
Episode 9034: Time: 0.40090227127075195, Total Reward: 239.5458576642769, Q Loss: 13276726.75, Actor Loss: -195337.3837890625
Episode 9035: Time: 0.19316601753234863, Total Reward: 109.62219575048213, Q Loss: 7573515.4140625, Actor Loss: -95718.1083984375
Episode 9036: Time: 0.4310476779937744, Total Reward: 258.28272331264316, Q Loss: 14793748.375, Actor Loss: -206675.07861328125
Episode 9037: Time: 0.8015568256378174, Total Reward: 491.4865617042335, Q Loss: 24874969.765625, Actor Loss: -389814.53857421875

Episode 9038: Time: 0.28194665908813477, Total Reward: 165.96228001326352, Q Loss: 11227399.78125, Actor Loss: -140365.28564453125
Episode 9039: Time: 0.41596508026123047, Total Reward: 248.6608682589928, Q Loss: 10611408.109375, Actor Loss: -204179.01806640625
Episode 9040: Time: 0.34122157096862793, Total Reward: 202.67910757701262, Q Loss: 8594812.859375, Actor Loss: -163575.65380859375
Episode 9041: Time: 0.2378218173980713, Total Reward: 138.46552339466365, Q Loss: 5292019.4375, Actor Loss: -114944.03955078125
Episode 9042: Time: 0.6526610851287842, Total Reward: 398.18825891454173, Q Loss: 21328839.7734375, Actor Loss: -313035.244140625
Episode 9043: Time: 1.352217197418213, Total Reward: 835.9264588950106, Q Loss: 43751954.90625, Actor Loss: -653231.3359375
Episode 9044: Time: 0.41549086570739746, Total Reward: 248.61626940634048, Q Loss: 14084056.8046875, Actor Loss: -198939.87109375
Episode 9045: Time: 0.22269868850708008, Total Reward: 128.8611192155066, Q Loss: 6985259.5625, Actor Loss: -103747.35595703125
Episode 9046: Time: 0.4155550003051758, Total Reward: 249.70677058561975, Q Loss: 11007752.515625, Actor Loss: -203007.5439453125
Episode 9047: Time: 0.6525633335113525, Total Reward: 395.4687168813559, Q Loss: 21745413.609375, Actor Loss: -309345.23876953125
Episode 9048: Time: 0.23732542991638184, Total Reward: 137.817939834783, Q Loss: 6014821.578125, Actor Loss: -113644.96728515625
Episode 9049: Time: 0.267179012298584, Total Reward: 156.33572569662215, Q Loss: 6967218.890625, Actor Loss: -128016.61865234375
Episode 9050: Time: 0.6969029903411865, Total Reward: 426.49596370507277, Q Loss: 21765597.15625, Actor Loss: -337003.796875
Episode 9051: Time: 0.43044018745422363, Total Reward: 258.3862037283491, Q Loss: 10760457.2421875, Actor Loss: -211957.17138671875
Episode 9052: Time: 0.2230701446533203, Total Reward: 127.6523419776466, Q Loss: 6355718.609375, Actor Loss: -105736.22998046875
Episode 9053: Time: 0.7566714286804199, Total Reward: 461.94179161233734, Q Loss: 26554878.421875, Actor Loss: -373224.86962890625
Episode 9054: Time: 0.6085937023162842, Total Reward: 369.848592581198, Q Loss: 18521770.8203125, Actor Loss: -286277.470703125
Episode 9055: Time: 0.3711404800415039, Total Reward: 221.77608011600893, Q Loss: 9471402.5703125, Actor Loss: -175181.06298828125
Episode 9056: Time: 0.44534850120544434, Total Reward: 267.1392039036503, Q Loss: 12405216.1640625, Actor Loss: -217225.521484375
Episode 9057: Time: 0.34110283851623535, Total Reward: 201.09593072281098, Q Loss: 9225007.2109375, Actor Loss: -166457.71142578125
Episode 9058: Time: 0.1781749725341797, Total Reward: 100.02415405324733, Q Loss: 5586598.515625, Actor Loss: -82892.92138671875
Episode 9059: Time: 0.1639115810394287, Total Reward: 90.9259569694171, Q Loss: 4822824.890625, Actor Loss: -82380.5166015625
Episode 9060: Time: 0.38556504249572754, Total Reward: 228.74058088396643, Q Loss: 11358153.703125, Actor Loss: -185576.8408203125
Episode 9061: Time: 0.9779415130615234, Total Reward: 602.0561965246934, Q Loss: 30246727.53125, Actor Loss: -473974.04443359375
Episode 9062: Time: 0.5638670921325684, Total Reward: 341.21330417157753, Q Loss: 17132307.3515625, Actor Loss: -271880.67041015625
Episode 9063: Time: 0.5189170837402344, Total Reward: 314.01156261052165, Q Loss: 19139286.421875, Actor Loss: -252555.20556640625
Episode 9064: Time: 0.23788142204284668, Total Reward: 137.86243503118246, Q Loss: 6582300.140625, Actor Loss: -116563.68408203125
Episode 9065: Time: 0.5481224060058594, Total Reward: 332.6367536047546, Q Loss: 19635985.1875, Actor Loss: -275083.67431640625

Episode 9066: Time: 0.3709092140197754, Total Reward: 220.54755452069318, Q Loss: 11250145.171875, Actor Loss: -180113.67431640625
Episode 9067: Time: 0.28212451934814453, Total Reward: 165.3317306616847, Q Loss: 8020836.40625, Actor Loss: -136683.6904296875
Episode 9068: Time: 0.5042729377746582, Total Reward: 306.4519540438982, Q Loss: 15988550.171875, Actor Loss: -241432.3388671875
Episode 9069: Time: 0.5633745193481445, Total Reward: 343.2749386651876, Q Loss: 19632205.25, Actor Loss: -268471.8330078125
Episode 9070: Time: 0.20833563804626465, Total Reward: 119.37561204658928, Q Loss: 6497769.9609375, Actor Loss: -97026.2529296875
Episode 9071: Time: 0.4598844051361084, Total Reward: 277.37604185526897, Q Loss: 14092879.7109375, Actor Loss: -226106.6669921875
Episode 9072: Time: 0.3712468147277832, Total Reward: 219.1110744473724, Q Loss: 12031296.40625, Actor Loss: -174129.75390625
Episode 9073: Time: 0.22300219535827637, Total Reward: 128.86575835683502, Q Loss: 6104661.4375, Actor Loss: -107956.20947265625
Episode 9074: Time: 1.2158160209655762, Total Reward: 751.3202473645932, Q Loss: 33749907.28125, Actor Loss: -583976.9135742188
Episode 9075: Time: 0.2819082736968994, Total Reward: 166.20158872786257, Q Loss: 11753768.4375, Actor Loss: -137705.61572265625
Episode 9076: Time: 0.3712155818939209, Total Reward: 220.16529967562968, Q Loss: 9191866.484375, Actor Loss: -182220.693359375
Episode 9077: Time: 0.7119882106781006, Total Reward: 436.1756663980482, Q Loss: 18269950.578125, Actor Loss: -346198.34033203125
Episode 9078: Time: 0.6373114585876465, Total Reward: 388.1548070459791, Q Loss: 17305214.6640625, Actor Loss: -310069.5302734375
Episode 9079: Time: 0.14844417572021484, Total Reward: 81.52950524097457, Q Loss: 5711862.375, Actor Loss: -68931.5693359375
Episode 9080: Time: 0.7422022819519043, Total Reward: 452.75388343353507, Q Loss: 22765015.6875, Actor Loss: -362224.87646484375
Episode 9081: Time: 0.7264306545257568, Total Reward: 446.01245195763573, Q Loss: 26413766.671875, Actor Loss: -357881.53515625
Episode 9082: Time: 0.19342398643493652, Total Reward: 110.28858438502749, Q Loss: 5766718.90625, Actor Loss: -93692.9482421875
Episode 9083: Time: 0.4156651496887207, Total Reward: 249.54482772105573, Q Loss: 14126370.3515625, Actor Loss: -200776.4775390625
Episode 9084: Time: 0.3565497398376465, Total Reward: 210.54963830782629, Q Loss: 12517523.875, Actor Loss: -174967.77587890625
Episode 9085: Time: 0.7267444133758545, Total Reward: 441.6764558875651, Q Loss: 22863124.4375, Actor Loss: -358102.00146484375
Episode 9086: Time: 0.2675778865814209, Total Reward: 156.03479738409305, Q Loss: 12085386.75, Actor Loss: -131263.70556640625
Episode 9087: Time: 0.5944983959197998, Total Reward: 360.9938297171253, Q Loss: 17117226.84375, Actor Loss: -292469.34228515625
Episode 9088: Time: 0.5642943382263184, Total Reward: 341.58781109418345, Q Loss: 20027616.9375, Actor Loss: -272206.21728515625
Episode 9089: Time: 0.10427069664001465, Total Reward: 53.988743980367964, Q Loss: 4710413.09375, Actor Loss: -53373.72802734375
Episode 9090: Time: 0.5061545372009277, Total Reward: 303.43093019298567, Q Loss: 14262358.7109375, Actor Loss: -246113.0361328125
Episode 9091: Time: 0.23816823959350586, Total Reward: 137.02341987465937, Q Loss: 8007439.796875, Actor Loss: -118505.05419921875
Episode 9092: Time: 1.484222650527954, Total Reward: 920.8092111498705, Q Loss: 43782948.3828125, Actor Loss: -732440.5126953125
Episode 9093: Time: 0.14888906478881836, Total Reward: 81.26433716662322, Q Loss: 4605568.5, Actor Loss: -72329.1396484375

Episode 9094: Time: 0.5204310417175293, Total Reward: 314.3865932303406, Q Loss: 16991416.796875, Actor Loss: -251852.0341796875
Episode 9095: Time: 0.6394445896148682, Total Reward: 390.0219045715033, Q Loss: 20590688.734375, Actor Loss: -313653.4951171875
Episode 9096: Time: 0.297884464263916, Total Reward: 173.75628134554862, Q Loss: 10726105.8125, Actor Loss: -141385.68212890625
Episode 9097: Time: 0.7276344299316406, Total Reward: 444.6214542548363, Q Loss: 22332361.28125, Actor Loss: -352145.1748046875
Episode 9098: Time: 0.23789596557617188, Total Reward: 136.7295833957403, Q Loss: 7671644.1640625, Actor Loss: -114930.23291015625
Episode 9099: Time: 0.5638659000396729, Total Reward: 342.7652062014202, Q Loss: 21198167.53125, Actor Loss: -278741.45556640625
Validation Mean: 9351.459378553187, Validation Std: 0.18218989173804695
saving model
Episode 9100: Time: 0.8937866687774658, Total Reward: 544.4840346016732, Q Loss: 28157242.0078125, Actor Loss: -438453.48486328125
Episode 9101: Time: 0.37326550483703613, Total Reward: 220.60850716307274, Q Loss: 11978862.421875, Actor Loss: -177445.2060546875
Episode 9102: Time: 0.8006670475006104, Total Reward: 490.84319168329694, Q Loss: 25710771.1171875, Actor Loss: -392365.01318359375
Episode 9103: Time: 0.7859852313995361, Total Reward: 482.7362987094182, Q Loss: 26442774.8671875, Actor Loss: -387369.580078125
Episode 9104: Time: 0.6381967067718506, Total Reward: 388.1597549222841, Q Loss: 22987530.234375, Actor Loss: -311476.97998046875
Episode 9105: Time: 0.20814275741577148, Total Reward: 118.76374247307469, Q Loss: 7247968.75, Actor Loss: -106047.1552734375
Episode 9106: Time: 0.3418726921081543, Total Reward: 202.39864914760258, Q Loss: 12751593.1640625, Actor Loss: -172526.1025390625
Episode 9107: Time: 0.2825765609741211, Total Reward: 165.89038906443128, Q Loss: 9990389.90625, Actor Loss: -136304.65283203125
Episode 9108: Time: 0.3709995746612549, Total Reward: 219.59293235371135, Q Loss: 12610412.6640625, Actor Loss: -184312.0771484375
Episode 9109: Time: 0.2384932041168213, Total Reward: 137.6798948765353, Q Loss: 10185997.96875, Actor Loss: -115888.19287109375
Episode 9110: Time: 0.29767560958862305, Total Reward: 174.76267691813837, Q Loss: 7354950.609375, Actor Loss: -145847.119140625
Episode 9111: Time: 0.34293603897094727, Total Reward: 202.04697060454671, Q Loss: 11506209.8515625, Actor Loss: -170545.634765625
Episode 9112: Time: 0.20862221717834473, Total Reward: 119.47465228749714, Q Loss: 8495904.0, Actor Loss: -103166.54736328125
Episode 9113: Time: 0.19331121444702148, Total Reward: 110.01982495104319, Q Loss: 6030472.796875, Actor Loss: -95805.8271484375
Episode 9114: Time: 0.23837566375732422, Total Reward: 137.5234242992151, Q Loss: 6015535.921875, Actor Loss: -117009.22900390625
Episode 9115: Time: 0.25304484367370605, Total Reward: 146.45521906559557, Q Loss: 8468924.390625, Actor Loss: -123737.92236328125
Episode 9116: Time: 0.6537275314331055, Total Reward: 397.6077413046722, Q Loss: 25866637.296875, Actor Loss: -323524.2255859375
Episode 9117: Time: 0.31264662742614746, Total Reward: 183.10741159009376, Q Loss: 8595221.875, Actor Loss: -156441.40185546875
Episode 9118: Time: 0.31293678283691406, Total Reward: 183.40477179167985, Q Loss: 11378079.078125, Actor Loss: -156750.041015625
Episode 9119: Time: 0.9951145648956299, Total Reward: 610.7720905085267, Q Loss: 35802552.0546875, Actor Loss: -493287.64208984375
Episode 9120: Time: 0.40186262130737305, Total Reward: 239.43768963052105, Q Loss: 11290816.0703125, Actor Loss: -204683.37451171875

Episode 9121: Time: 0.4458317756652832, Total Reward: 265.90943688026994, Q Loss: 13644083.375, Actor Loss: -220209.583984375
Episode 9122: Time: 0.34263062477111816, Total Reward: 202.09293218741314, Q Loss: 13136874.625, Actor Loss: -163600.51904296875
Episode 9123: Time: 0.8607938289642334, Total Reward: 528.3089428746424, Q Loss: 31742945.9296875, Actor Loss: -422782.365234375
Episode 9124: Time: 0.6238517761230469, Total Reward: 379.18299067365876, Q Loss: 18356349.5, Actor Loss: -308307.72998046875
Episode 9125: Time: 0.19296836853027344, Total Reward: 109.16633214723721, Q Loss: 6723905.703125, Actor Loss: -98309.60693359375
Episode 9126: Time: 0.16427898406982422, Total Reward: 91.04998298531319, Q Loss: 5110597.875, Actor Loss: -82041.39013671875
Episode 9127: Time: 0.34116673469543457, Total Reward: 203.26654929518872, Q Loss: 11170187.625, Actor Loss: -174435.88330078125
Episode 9128: Time: 0.6983182430267334, Total Reward: 426.40373571455007, Q Loss: 26522337.53125, Actor Loss: -349537.5478515625
Episode 9129: Time: 0.17845726013183594, Total Reward: 99.76010585588124, Q Loss: 6356944.28125, Actor Loss: -87087.16748046875
Episode 9130: Time: 0.3864767551422119, Total Reward: 231.18933432602705, Q Loss: 13052384.6640625, Actor Loss: -195301.828125
Episode 9131: Time: 0.5791666507720947, Total Reward: 352.31902401209254, Q Loss: 21451243.703125, Actor Loss: -288077.11328125
Episode 9132: Time: 0.8171107769012451, Total Reward: 499.43623172068675, Q Loss: 29523827.8515625, Actor Loss: -402699.76171875
Episode 9133: Time: 0.20861506462097168, Total Reward: 119.1107531603877, Q Loss: 7918497.21875, Actor Loss: -98711.06884765625
Episode 9134: Time: 0.6994309425354004, Total Reward: 426.88299658242664, Q Loss: 24032422.078125, Actor Loss: -350290.79052734375
Episode 9135: Time: 0.35807347297668457, Total Reward: 212.76489340544043, Q Loss: 12280865.546875, Actor Loss: -171906.0458984375
Episode 9136: Time: 0.2972888946533203, Total Reward: 173.55279069068087, Q Loss: 9032593.875, Actor Loss: -144339.60498046875
Episode 9137: Time: 1.5276379585266113, Total Reward: 948.0203948101085, Q Loss: 53286664.046875, Actor Loss: -766023.9970703125
Episode 9138: Time: 0.7281227111816406, Total Reward: 442.3538753260965, Q Loss: 25225761.4453125, Actor Loss: -367099.24755859375
Episode 9139: Time: 0.5350887775421143, Total Reward: 322.6990547361226, Q Loss: 16126360.015625, Actor Loss: -263819.35205078125
Episode 9140: Time: 0.11914515495300293, Total Reward: 63.118977218398534, Q Loss: 3824283.53125, Actor Loss: -60530.3525390625
Episode 9141: Time: 0.3417541980743408, Total Reward: 203.80094021536465, Q Loss: 10772070.78125, Actor Loss: -173874.81103515625
Episode 9142: Time: 0.4162557125091553, Total Reward: 248.54452425221848, Q Loss: 12855552.4296875, Actor Loss: -216754.28173828125
Episode 9143: Time: 0.3120613098144531, Total Reward: 184.1196340940271, Q Loss: 10479834.03125, Actor Loss: -151904.7119140625
Episode 9144: Time: 0.5489790439605713, Total Reward: 333.5419478818564, Q Loss: 16776611.203125, Actor Loss: -279052.0625
Episode 9145: Time: 0.25271105766296387, Total Reward: 146.6677839648496, Q Loss: 9817638.390625, Actor Loss: -127146.80859375
Episode 9146: Time: 0.5202412605285645, Total Reward: 314.02966919884483, Q Loss: 18092184.953125, Actor Loss: -261349.318359375
Episode 9147: Time: 0.6392216682434082, Total Reward: 389.32005391518027, Q Loss: 24942632.28125, Actor Loss: -318625.61279296875
Episode 9148: Time: 0.37181687355041504, Total Reward: 221.45689803357152, Q Loss: 12495050.0625, Actor Loss: -190437.59619140625

Episode 9149: Time: 0.5049819946289062, Total Reward: 305.26960400201375, Q Loss: 16643563.359375, Actor Loss: -246298.40673828125
Episode 9150: Time: 0.3567023277282715, Total Reward: 211.34862499056914, Q Loss: 14832819.953125, Actor Loss: -178712.91455078125
Episode 9151: Time: 0.20871925354003906, Total Reward: 118.8659165611877, Q Loss: 6274837.90625, Actor Loss: -107611.8720703125
Episode 9152: Time: 0.41654372215270996, Total Reward: 248.13054015549014, Q Loss: 11703454.765625, Actor Loss: -207912.38623046875
Episode 9153: Time: 0.4905364513397217, Total Reward: 296.5107603745767, Q Loss: 20208233.25, Actor Loss: -245847.3076171875
Episode 9154: Time: 0.3127143383026123, Total Reward: 184.46493161300035, Q Loss: 12189115.515625, Actor Loss: -158158.25634765625
Episode 9155: Time: 0.3873915672302246, Total Reward: 230.6280376660492, Q Loss: 13086224.0625, Actor Loss: -186165.76123046875
Episode 9156: Time: 0.20883917808532715, Total Reward: 118.49336804629257, Q Loss: 6839399.5625, Actor Loss: -102892.7119140625
Episode 9157: Time: 0.3571932315826416, Total Reward: 212.82019847956778, Q Loss: 11827764.171875, Actor Loss: -174065.681640625
Episode 9158: Time: 0.25315189361572266, Total Reward: 147.28558164419192, Q Loss: 7369833.90625, Actor Loss: -129769.15869140625
Episode 9159: Time: 0.9650077819824219, Total Reward: 590.9235034268446, Q Loss: 33776166.53125, Actor Loss: -487886.42578125
Episode 9160: Time: 0.19342494010925293, Total Reward: 109.52962721506348, Q Loss: 6373397.015625, Actor Loss: -96790.64697265625
Episode 9161: Time: 0.4163789749145508, Total Reward: 248.5538825730285, Q Loss: 13268821.1953125, Actor Loss: -216999.9130859375
Episode 9162: Time: 0.2381138801574707, Total Reward: 137.9129005292958, Q Loss: 7588647.546875, Actor Loss: -119802.72509765625
Episode 9163: Time: 0.2973296642303467, Total Reward: 173.35757450351684, Q Loss: 9261882.84375, Actor Loss: -153277.19091796875
Episode 9164: Time: 0.4014091491699219, Total Reward: 240.3086708023641, Q Loss: 12480827.2265625, Actor Loss: -200013.88720703125
Episode 9165: Time: 0.19367527961730957, Total Reward: 109.50283217558598, Q Loss: 7406412.390625, Actor Loss: -100676.748046875
Episode 9166: Time: 0.34218907356262207, Total Reward: 203.11327554135786, Q Loss: 10361944.31640625, Actor Loss: -171965.22412109375
Episode 9167: Time: 0.32749080657958984, Total Reward: 193.93904773273908, Q Loss: 12901527.0, Actor Loss: -162690.6630859375
Episode 9168: Time: 0.3122272491455078, Total Reward: 184.74610259698179, Q Loss: 11246718.90625, Actor Loss: -163602.50390625
Episode 9169: Time: 0.10447883605957031, Total Reward: 53.48459322250112, Q Loss: 3295979.46875, Actor Loss: -50097.5390625
Episode 9170: Time: 0.4612762928009033, Total Reward: 275.81064451785664, Q Loss: 15704598.875, Actor Loss: -222543.13623046875
Episode 9171: Time: 0.1936321258544922, Total Reward: 110.50728061776815, Q Loss: 4622374.0, Actor Loss: -101048.31005859375
Episode 9172: Time: 0.5345687866210938, Total Reward: 323.07775647400314, Q Loss: 19433304.1875, Actor Loss: -270912.5888671875
Episode 9173: Time: 0.550105094909668, Total Reward: 332.25926341232116, Q Loss: 18115377.75, Actor Loss: -281681.6357421875
Episode 9174: Time: 0.8018004894256592, Total Reward: 489.0081135309466, Q Loss: 26234079.8828125, Actor Loss: -409018.18701171875
Episode 9175: Time: 0.7565634250640869, Total Reward: 463.6948984547406, Q Loss: 25604071.328125, Actor Loss: -379869.20361328125
Episode 9176: Time: 0.638542890548706, Total Reward: 388.4272254761131, Q Loss: 20172110.3203125, Actor Loss: -325243.9443359375

Episode 9177: Time: 0.2975883483886719, Total Reward: 174.9493833056874, Q Loss: 11005747.515625, Actor Loss: -154527.68408203125
Episode 9178: Time: 0.17848682403564453, Total Reward: 100.57355228307993, Q Loss: 6898121.421875, Actor Loss: -90112.74560546875
Episode 9179: Time: 1.7211058139801025, Total Reward: 1066.9233675102437, Q Loss: 56699736.28125, Actor Loss: -871914.2524414062
Episode 9180: Time: 0.3567342758178711, Total Reward: 210.0029356818988, Q Loss: 13031716.8203125, Actor Loss: -183089.77685546875
Episode 9181: Time: 0.3117074966430664, Total Reward: 183.295562740978, Q Loss: 9446848.078125, Actor Loss: -158153.3017578125
Episode 9182: Time: 0.48953700065612793, Total Reward: 295.8952238828937, Q Loss: 15563885.84375, Actor Loss: -250511.0546875
Episode 9183: Time: 0.17814898490905762, Total Reward: 100.17759637860917, Q Loss: 6270421.421875, Actor Loss: -88609.87841796875
Episode 9184: Time: 0.17865824699401855, Total Reward: 100.76052320446858, Q Loss: 7462114.5625, Actor Loss: -90370.18212890625
Episode 9185: Time: 0.16385412216186523, Total Reward: 91.68825913732893, Q Loss: 5094774.421875, Actor Loss: -86196.19921875
Episode 9186: Time: 0.37232112884521484, Total Reward: 220.8084931506891, Q Loss: 12912209.5, Actor Loss: -187432.4169921875
Episode 9187: Time: 1.2464993000030518, Total Reward: 770.5738913304953, Q Loss: 41950404.0, Actor Loss: -647517.8056640625
Episode 9188: Time: 0.16400909423828125, Total Reward: 91.19610555040383, Q Loss: 5411915.34375, Actor Loss: -80458.05859375
Episode 9189: Time: 0.35706448554992676, Total Reward: 211.4645394695712, Q Loss: 9917196.3671875, Actor Loss: -179481.44287109375
Episode 9190: Time: 0.11914658546447754, Total Reward: 62.988822153891036, Q Loss: 3176353.890625, Actor Loss: -59831.3759765625
Episode 9191: Time: 0.2088322639465332, Total Reward: 118.97040777743096, Q Loss: 7292463.15625, Actor Loss: -100763.15771484375
Episode 9192: Time: 0.4466121196746826, Total Reward: 267.02459587986647, Q Loss: 14206370.546875, Actor Loss: -223579.62890625
Episode 9193: Time: 0.2684624195098877, Total Reward: 156.82718614731334, Q Loss: 7202850.1015625, Actor Loss: -137299.8203125
Episode 9194: Time: 0.41679954528808594, Total Reward: 248.53415203054314, Q Loss: 14772235.0, Actor Loss: -208540.22900390625
Episode 9195: Time: 0.550506591796875, Total Reward: 331.872983585229, Q Loss: 21814977.921875, Actor Loss: -284952.9423828125
Episode 9196: Time: 0.20844388008117676, Total Reward: 118.45592178903313, Q Loss: 7680925.078125, Actor Loss: -105222.046875
Episode 9197: Time: 0.29770326614379883, Total Reward: 173.49054365639606, Q Loss: 12364690.28125, Actor Loss: -147713.29296875
Episode 9198: Time: 0.5500643253326416, Total Reward: 331.0267394284666, Q Loss: 22423562.0703125, Actor Loss: -286236.85009765625
Episode 9199: Time: 0.14886093139648438, Total Reward: 81.67179834938136, Q Loss: 4200843.859375, Actor Loss: -74456.14111328125
Validation Mean: 9352.155123323713, Validation Std: 0.21368588932161506
saving model
Episode 9200: Time: 0.24017834663391113, Total Reward: 137.87532800323794, Q Loss: 7292851.125, Actor Loss: -116977.09765625
Episode 9201: Time: 0.16377687454223633, Total Reward: 91.02104383405864, Q Loss: 7224124.265625, Actor Loss: -79414.82373046875
Episode 9202: Time: 0.23833250999450684, Total Reward: 137.83626572046407, Q Loss: 9317030.71875, Actor Loss: -121523.17236328125
Episode 9203: Time: 0.416126012802124, Total Reward: 249.48867193488047, Q Loss: 14116041.609375, Actor Loss: -214020.82763671875

Episode 9204: Time: 0.28279900550842285, Total Reward: 165.66576122366104, Q Loss: 11950343.8828125, Actor Loss: -147960.73876953125
Episode 9205: Time: 0.3867781162261963, Total Reward: 229.52927615153493, Q Loss: 12629158.5546875, Actor Loss: -196671.4033203125
Episode 9206: Time: 0.13419699668884277, Total Reward: 72.64169515942017, Q Loss: 6017480.40625, Actor Loss: -67887.77099609375
Episode 9207: Time: 0.5056979656219482, Total Reward: 304.69147547282523, Q Loss: 15473815.09375, Actor Loss: -265265.34326171875
Episode 9208: Time: 0.7419619560241699, Total Reward: 452.51185439440496, Q Loss: 30724279.890625, Actor Loss: -377525.8193359375
Episode 9209: Time: 0.40178513526916504, Total Reward: 238.0859714668043, Q Loss: 14863699.75, Actor Loss: -204950.419921875
Episode 9210: Time: 0.23812460899353027, Total Reward: 137.65535197129063, Q Loss: 8726012.09375, Actor Loss: -122262.546875
Episode 9211: Time: 0.8916263580322266, Total Reward: 546.9870056670952, Q Loss: 30901011.5234375, Actor Loss: -450920.73291015625
Episode 9212: Time: 0.49082517623901367, Total Reward: 296.45480344802775, Q Loss: 17357027.9375, Actor Loss: -250975.22412109375
Episode 9213: Time: 0.623685359954834, Total Reward: 380.4966499239974, Q Loss: 21914611.625, Actor Loss: -319841.84130859375
Episode 9214: Time: 1.2918193340301514, Total Reward: 797.7609246011181, Q Loss: 47988703.828125, Actor Loss: -653229.4184570312
Episode 9215: Time: 0.5205633640289307, Total Reward: 314.53240632247514, Q Loss: 16871674.8125, Actor Loss: -264389.33837890625
Episode 9216: Time: 0.8180720806121826, Total Reward: 500.33785262552306, Q Loss: 23478242.484375, Actor Loss: -420790.96630859375
Episode 9217: Time: 0.2974364757537842, Total Reward: 175.24340342903062, Q Loss: 8793839.03125, Actor Loss: -148665.97607421875
Episode 9218: Time: 0.40233850479125977, Total Reward: 239.316014382732, Q Loss: 12495486.5, Actor Loss: -202657.5224609375
Episode 9219: Time: 0.3273015022277832, Total Reward: 193.36098168166973, Q Loss: 11253575.203125, Actor Loss: -165577.8974609375
Episode 9220: Time: 0.5805127620697021, Total Reward: 351.68327738279953, Q Loss: 20067842.828125, Actor Loss: -298127.04833984375
Episode 9221: Time: 0.815575122833252, Total Reward: 500.34634768431374, Q Loss: 26226962.390625, Actor Loss: -414141.20947265625
Episode 9222: Time: 0.5492820739746094, Total Reward: 333.32934431639836, Q Loss: 20368637.609375, Actor Loss: -281556.9150390625
Episode 9223: Time: 0.8307998180389404, Total Reward: 509.73700920896925, Q Loss: 31362534.8359375, Actor Loss: -431452.4560546875
Episode 9224: Time: 0.40164852142333984, Total Reward: 239.70550321268018, Q Loss: 14371836.453125, Actor Loss: -204212.61962890625
Episode 9225: Time: 0.7576792240142822, Total Reward: 463.55868974191026, Q Loss: 26311087.9375, Actor Loss: -383090.7802734375
Episode 9226: Time: 0.8173742294311523, Total Reward: 500.27635800783753, Q Loss: 29626992.046875, Actor Loss: -416625.5087890625
Episode 9227: Time: 0.43126988410949707, Total Reward: 256.7457296257057, Q Loss: 13597075.65625, Actor Loss: -222921.47021484375
Episode 9228: Time: 0.19339537620544434, Total Reward: 109.77393690080258, Q Loss: 5296660.7265625, Actor Loss: -99259.248046875
Episode 9229: Time: 0.47695469856262207, Total Reward: 285.9872377584925, Q Loss: 17715771.5546875, Actor Loss: -240364.63134765625
Episode 9230: Time: 0.49155306816101074, Total Reward: 295.192004022982, Q Loss: 14780471.65625, Actor Loss: -249818.36328125
Episode 9231: Time: 0.16467499732971191, Total Reward: 91.02177099517449, Q Loss: 9247941.34375, Actor Loss: -84367.15087890625

Episode 9232: Time: 0.17960715293884277, Total Reward: 101.28300283493117, Q Loss: 6164189.28125, Actor Loss: -95535.5625
Episode 9233: Time: 0.17880868911743164, Total Reward: 99.06207439633543, Q Loss: 5370726.265625, Actor Loss: -88836.791015625
Episode 9234: Time: 0.3574213981628418, Total Reward: 210.47999955026017, Q Loss: 11876039.8203125, Actor Loss: -181738.32080078125
Episode 9235: Time: 0.3865523338317871, Total Reward: 230.08934005370398, Q Loss: 12326992.859375, Actor Loss: -202322.81640625
Episode 9236: Time: 0.6399340629577637, Total Reward: 388.283191375555, Q Loss: 21526782.3984375, Actor Loss: -330327.21044921875
Episode 9237: Time: 0.6394734382629395, Total Reward: 389.77457174882943, Q Loss: 24424357.46875, Actor Loss: -336845.6572265625
Episode 9238: Time: 0.5796611309051514, Total Reward: 351.6149888494353, Q Loss: 22917369.0078125, Actor Loss: -299182.86572265625
Episode 9239: Time: 0.6676840782165527, Total Reward: 407.56849710803937, Q Loss: 21242229.90625, Actor Loss: -345021.7607421875
Episode 9240: Time: 0.11901235580444336, Total Reward: 63.031807156868474, Q Loss: 3465938.84375, Actor Loss: -58775.47216796875
Episode 9241: Time: 0.14927101135253906, Total Reward: 81.92644372756385, Q Loss: 5353013.046875, Actor Loss: -76180.15478515625
Episode 9242: Time: 0.6827154159545898, Total Reward: 416.4909682422095, Q Loss: 18339967.140625, Actor Loss: -358772.88671875
Episode 9243: Time: 0.2674105167388916, Total Reward: 157.00074136239098, Q Loss: 9960894.375, Actor Loss: -145341.38330078125
Episode 9244: Time: 0.37163519859313965, Total Reward: 220.25955049996796, Q Loss: 9505553.90625, Actor Loss: -189144.0283203125
Episode 9245: Time: 0.7867884635925293, Total Reward: 482.7558335801156, Q Loss: 28099210.6875, Actor Loss: -415315.5751953125
Episode 9246: Time: 0.6242327690124512, Total Reward: 379.2884672144581, Q Loss: 18642170.25, Actor Loss: -326753.1845703125
Episode 9247: Time: 0.40081143379211426, Total Reward: 238.79499086097067, Q Loss: 13611903.078125, Actor Loss: -210799.306640625
Episode 9248: Time: 0.7422723770141602, Total Reward: 452.148707868303, Q Loss: 25990919.453125, Actor Loss: -379414.58251953125
Episode 9249: Time: 0.7274203300476074, Total Reward: 443.88605654115406, Q Loss: 24026116.75, Actor Loss: -378024.50634765625
Episode 9250: Time: 0.13379549980163574, Total Reward: 72.41278356894608, Q Loss: 4914037.8125, Actor Loss: -68848.4248046875
Episode 9251: Time: 0.6982297897338867, Total Reward: 426.98814741940026, Q Loss: 20153454.4375, Actor Loss: -358276.1005859375
Episode 9252: Time: 0.8304939270019531, Total Reward: 508.23791380321774, Q Loss: 25737603.265625, Actor Loss: -429250.3994140625
Episode 9253: Time: 0.29742956161499023, Total Reward: 174.48138591418862, Q Loss: 10438135.328125, Actor Loss: -154348.11181640625
Episode 9254: Time: 0.10428190231323242, Total Reward: 54.26044454683131, Q Loss: 2506693.203125, Actor Loss: -52906.99951171875
Episode 9255: Time: 0.35619449615478516, Total Reward: 210.42694176455302, Q Loss: 19084827.625, Actor Loss: -185635.72900390625
Episode 9256: Time: 0.7703492641448975, Total Reward: 472.71091893045667, Q Loss: 25810277.5078125, Actor Loss: -403222.77197265625
Episode 9257: Time: 0.4742391109466553, Total Reward: 286.4703713744412, Q Loss: 14473962.40625, Actor Loss: -254777.98193359375
Episode 9258: Time: 0.7413053512573242, Total Reward: 451.5783371715832, Q Loss: 26247239.2109375, Actor Loss: -383948.2734375
Episode 9259: Time: 0.6238017082214355, Total Reward: 379.7913086767378, Q Loss: 22515147.8125, Actor Loss: -321735.80224609375

Episode 9260: Time: 1.5579180717468262, Total Reward: 966.2410877333328, Q Loss: 53380812.171875, Actor Loss: -808491.6479492188
Episode 9261: Time: 0.5202946662902832, Total Reward: 313.45323413005144, Q Loss: 21258071.171875, Actor Loss: -272616.25
Episode 9262: Time: 0.34201860427856445, Total Reward: 203.28595601045436, Q Loss: 11493269.71875, Actor Loss: -184244.23291015625
Episode 9263: Time: 0.5051047801971436, Total Reward: 305.68491305529767, Q Loss: 16699596.9296875, Actor Loss: -266122.87841796875
Episode 9264: Time: 0.20787739753723145, Total Reward: 118.892921219528, Q Loss: 7871736.546875, Actor Loss: -109875.8994140625
Episode 9265: Time: 0.14870786666870117, Total Reward: 81.80426365663168, Q Loss: 3628079.59375, Actor Loss: -78335.04052734375
Episode 9266: Time: 0.6832809448242188, Total Reward: 416.96433320232313, Q Loss: 23251962.2578125, Actor Loss: -353827.86865234375
Episode 9267: Time: 0.5194427967071533, Total Reward: 313.00117776269315, Q Loss: 21610012.3359375, Actor Loss: -271482.294921875
Episode 9268: Time: 0.37228989601135254, Total Reward: 219.36951175398784, Q Loss: 12326076.5, Actor Loss: -191497.310546875
Episode 9269: Time: 0.8611676692962646, Total Reward: 528.4650481895023, Q Loss: 34134478.25, Actor Loss: -450142.01611328125
Episode 9270: Time: 0.5789957046508789, Total Reward: 352.0702959009806, Q Loss: 23530541.859375, Actor Loss: -304041.5478515625
Episode 9271: Time: 0.8620879650115967, Total Reward: 527.3035814603483, Q Loss: 32463264.9375, Actor Loss: -453449.4853515625
Episode 9272: Time: 0.3272233009338379, Total Reward: 193.13111510735916, Q Loss: 14004355.546875, Actor Loss: -171514.90869140625
Episode 9273: Time: 0.6538069248199463, Total Reward: 397.73909763134964, Q Loss: 25266125.6796875, Actor Loss: -342913.830078125
Episode 9274: Time: 0.16415643692016602, Total Reward: 91.29078727491198, Q Loss: 6794888.96875, Actor Loss: -85464.37548828125
Episode 9275: Time: 0.3868222236633301, Total Reward: 230.53210245405137, Q Loss: 13388592.4375, Actor Loss: -205564.5185546875
Episode 9276: Time: 1.9107332229614258, Total Reward: 1190.8459367319886, Q Loss: 65854097.421875, Actor Loss: -1003761.3920898438
Episode 9277: Time: 0.7125482559204102, Total Reward: 433.0907238136788, Q Loss: 33273507.296875, Actor Loss: -381183.61328125
Episode 9278: Time: 0.5049066543579102, Total Reward: 305.0337483707192, Q Loss: 17892777.359375, Actor Loss: -262649.86279296875
Episode 9279: Time: 0.2227013111114502, Total Reward: 128.37576420419427, Q Loss: 5603208.265625, Actor Loss: -117153.263671875
Episode 9280: Time: 0.638092041015625, Total Reward: 389.8011485505247, Q Loss: 22874921.1875, Actor Loss: -335281.90283203125
Episode 9281: Time: 0.14857792854309082, Total Reward: 82.36699021021394, Q Loss: 5860178.375, Actor Loss: -78796.755859375
Episode 9282: Time: 0.17866134643554688, Total Reward: 99.9578547410172, Q Loss: 4204526.078125, Actor Loss: -93990.55615234375
Episode 9283: Time: 0.5338699817657471, Total Reward: 323.93367005149895, Q Loss: 17307429.6875, Actor Loss: -280066.5908203125
Episode 9284: Time: 0.5196218490600586, Total Reward: 314.1720741886776, Q Loss: 19925726.3828125, Actor Loss: -277812.32861328125
Episode 9285: Time: 0.34250545501708984, Total Reward: 201.95666284813015, Q Loss: 10919135.0, Actor Loss: -177463.67822265625
Episode 9286: Time: 0.22339510917663574, Total Reward: 128.28570357897846, Q Loss: 5573240.90625, Actor Loss: -120143.3095703125
Episode 9287: Time: 0.326932430267334, Total Reward: 193.5021730355015, Q Loss: 10043056.0390625, Actor Loss: -178928.31689453125

Episode 9288: Time: 0.35640549659729004, Total Reward: 211.28841765835284, Q Loss: 10474719.1875, Actor Loss: -187903.015625
Episode 9289: Time: 0.4613325595855713, Total Reward: 275.59900724132615, Q Loss: 15156233.8515625, Actor Loss: -240822.26123046875
Episode 9290: Time: 0.5043356418609619, Total Reward: 303.6447111600691, Q Loss: 13793588.09375, Actor Loss: -264106.57373046875
Episode 9291: Time: 0.6837725639343262, Total Reward: 416.7222685851564, Q Loss: 28144948.65625, Actor Loss: -368208.939453125
Episode 9292: Time: 0.6678211688995361, Total Reward: 406.84126208259096, Q Loss: 25143364.4375, Actor Loss: -357771.671875
Episode 9293: Time: 0.26720666885375977, Total Reward: 156.57205096339266, Q Loss: 9331001.796875, Actor Loss: -144532.9287109375
Episode 9294: Time: 0.20845413208007812, Total Reward: 119.30794008876359, Q Loss: 9603073.8125, Actor Loss: -105319.943359375
Episode 9295: Time: 0.19327640533447266, Total Reward: 109.83573460236536, Q Loss: 8519539.21875, Actor Loss: -102089.10595703125
Episode 9296: Time: 0.6244707107543945, Total Reward: 380.2345319981333, Q Loss: 21502298.4296875, Actor Loss: -330585.7333984375
Episode 9297: Time: 0.3270576000213623, Total Reward: 193.44014070345523, Q Loss: 14591483.1875, Actor Loss: -169910.06689453125
Episode 9298: Time: 0.8014638423919678, Total Reward: 488.86733127611996, Q Loss: 29036628.1640625, Actor Loss: -421655.0107421875
Episode 9299: Time: 0.3420891761779785, Total Reward: 202.3517347110104, Q Loss: 9897148.671875, Actor Loss: -177389.42822265625
Validation Mean: 9349.489868185681, Validation Std: 0.1957184412071203
saving model
Episode 9300: Time: 0.12339925765991211, Total Reward: 53.5990030591814, Q Loss: 4223636.640625, Actor Loss: -54593.02392578125
Episode 9301: Time: 0.32374119758605957, Total Reward: 175.27050568071644, Q Loss: 11788375.34375, Actor Loss: -154752.3466796875
Episode 9302: Time: 0.6738643646240234, Total Reward: 397.56728723233397, Q Loss: 24553290.65625, Actor Loss: -349319.78759765625
Episode 9303: Time: 0.720827579498291, Total Reward: 435.5821106891307, Q Loss: 23924299.5625, Actor Loss: -373378.37060546875
Episode 9304: Time: 0.7167978286743164, Total Reward: 433.3573440623369, Q Loss: 26344020.109375, Actor Loss: -380733.220703125
Episode 9305: Time: 0.4330861568450928, Total Reward: 258.3973917651743, Q Loss: 14700593.21875, Actor Loss: -231462.4541015625
Episode 9306: Time: 0.5817456245422363, Total Reward: 352.4644603332286, Q Loss: 24544042.03125, Actor Loss: -303618.46435546875
Episode 9307: Time: 0.9403676986694336, Total Reward: 573.1827743484861, Q Loss: 29677815.3984375, Actor Loss: -494078.4775390625
Episode 9308: Time: 0.25394701957702637, Total Reward: 146.57469898657925, Q Loss: 9954654.1875, Actor Loss: -136204.6064453125
Episode 9309: Time: 0.5369551181793213, Total Reward: 321.55407268704846, Q Loss: 20462884.328125, Actor Loss: -281823.056640625
Episode 9310: Time: 0.9820771217346191, Total Reward: 603.9897114789636, Q Loss: 37701958.984375, Actor Loss: -522875.72119140625
Episode 9311: Time: 0.4170827865600586, Total Reward: 248.03331782162135, Q Loss: 16452192.953125, Actor Loss: -221711.62890625
Episode 9312: Time: 0.2832159996032715, Total Reward: 166.0334073209397, Q Loss: 8123523.890625, Actor Loss: -145826.662109375
Episode 9313: Time: 0.386974573135376, Total Reward: 228.4496543873302, Q Loss: 11665868.578125, Actor Loss: -203251.3515625
Episode 9314: Time: 0.2092134952545166, Total Reward: 119.17030769742811, Q Loss: 6304388.859375, Actor Loss: -110837.47900390625

Episode 9315: Time: 0.44611525535583496, Total Reward: 268.0109675270794, Q Loss: 16803158.78125, Actor Loss: -239236.56591796875
Episode 9316: Time: 0.5799500942230225, Total Reward: 352.06093597777584, Q Loss: 20911804.1875, Actor Loss: -309859.08935546875
Episode 9317: Time: 0.8915150165557861, Total Reward: 547.6868521867502, Q Loss: 38636451.1328125, Actor Loss: -481795.375
Episode 9318: Time: 0.6385862827301025, Total Reward: 388.9362029862571, Q Loss: 24481197.5625, Actor Loss: -343564.3525390625
Episode 9319: Time: 0.29778409004211426, Total Reward: 175.20355647648617, Q Loss: 9913726.859375, Actor Loss: -162269.93896484375
Episode 9320: Time: 0.5798599720001221, Total Reward: 352.23357409541404, Q Loss: 25094637.921875, Actor Loss: -317132.68310546875
Episode 9321: Time: 0.26776671409606934, Total Reward: 155.96497490355492, Q Loss: 11227129.25, Actor Loss: -143208.94970703125
Episode 9322: Time: 0.6834356784820557, Total Reward: 417.9284849099649, Q Loss: 24051586.4921875, Actor Loss: -359508.97998046875
Episode 9323: Time: 0.32718920707702637, Total Reward: 193.51915392910618, Q Loss: 13684842.359375, Actor Loss: -170406.89111328125
Episode 9324: Time: 0.5199575424194336, Total Reward: 314.2584984394183, Q Loss: 18403150.4296875, Actor Loss: -276130.7724609375
Episode 9325: Time: 0.6537506580352783, Total Reward: 395.8516778573681, Q Loss: 25270168.2421875, Actor Loss: -342243.92724609375
Episode 9326: Time: 0.5352156162261963, Total Reward: 324.19607587114467, Q Loss: 18862490.25, Actor Loss: -285747.10791015625
Episode 9327: Time: 0.5055694580078125, Total Reward: 301.6900931926694, Q Loss: 21019194.53125, Actor Loss: -267708.64990234375
Episode 9328: Time: 0.5639631748199463, Total Reward: 341.568411216768, Q Loss: 23623214.296875, Actor Loss: -295371.0625
Episode 9329: Time: 0.9641029834747314, Total Reward: 591.5745058750623, Q Loss: 34617891.5, Actor Loss: -519908.11865234375
Episode 9330: Time: 0.7718009948730469, Total Reward: 472.833944323, Q Loss: 24705774.609375, Actor Loss: -411643.4951171875
Episode 9331: Time: 0.5948150157928467, Total Reward: 360.72482246031956, Q Loss: 24766064.9375, Actor Loss: -327274.9072265625
Episode 9332: Time: 0.6236364841461182, Total Reward: 379.82961490635756, Q Loss: 21452626.8203125, Actor Loss: -328660.77392578125
Episode 9333: Time: 0.342301607131958, Total Reward: 203.1390032441142, Q Loss: 12611859.96875, Actor Loss: -187706.390625
Episode 9334: Time: 0.5191893577575684, Total Reward: 314.91822450885394, Q Loss: 21234736.78125, Actor Loss: -278616.1591796875
Episode 9335: Time: 0.2826576232910156, Total Reward: 164.37132621678586, Q Loss: 8531488.71875, Actor Loss: -150845.10888671875
Episode 9336: Time: 0.6233847141265869, Total Reward: 380.05729205985017, Q Loss: 27104502.171875, Actor Loss: -342191.009765625
Episode 9337: Time: 1.0233745574951172, Total Reward: 630.6581055594055, Q Loss: 42820974.34375, Actor Loss: -546723.3803710938
Episode 9338: Time: 0.3278965950012207, Total Reward: 193.12877564590616, Q Loss: 15954905.2890625, Actor Loss: -174299.29296875
Episode 9339: Time: 0.653980016708374, Total Reward: 398.2158773781077, Q Loss: 22441871.46875, Actor Loss: -355542.935546875
Episode 9340: Time: 0.3716411590576172, Total Reward: 221.07125423038897, Q Loss: 14839965.546875, Actor Loss: -203308.29248046875
Episode 9341: Time: 0.5498611927032471, Total Reward: 332.8226112981903, Q Loss: 20897107.4375, Actor Loss: -290032.49609375
Episode 9342: Time: 0.4463174343109131, Total Reward: 268.57529856733237, Q Loss: 16383403.640625, Actor Loss: -238092.15478515625

Episode 9343: Time: 0.49159669876098633, Total Reward: 295.58828670208516, Q Loss: 21432549.234375, Actor Loss: -263162.7373046875
Episode 9344: Time: 0.1341080665588379, Total Reward: 72.34219448216501, Q Loss: 6669914.640625, Actor Loss: -72952.619140625
Episode 9345: Time: 0.23905706405639648, Total Reward: 137.01206119276335, Q Loss: 9483049.8125, Actor Loss: -127706.06103515625
Episode 9346: Time: 0.2681882381439209, Total Reward: 155.580241983967, Q Loss: 11095211.421875, Actor Loss: -146763.826171875
Episode 9347: Time: 0.1338965892791748, Total Reward: 72.19133288098317, Q Loss: 5830474.453125, Actor Loss: -73885.63818359375
Episode 9348: Time: 0.41672539710998535, Total Reward: 250.0156466776134, Q Loss: 14646994.953125, Actor Loss: -221914.728515625
Episode 9349: Time: 0.4462575912475586, Total Reward: 268.7185443875296, Q Loss: 14966034.390625, Actor Loss: -238897.97802734375
Episode 9350: Time: 0.25362539291381836, Total Reward: 147.1681821268708, Q Loss: 11731283.96875, Actor Loss: -132420.4091796875
Episode 9351: Time: 0.35758447647094727, Total Reward: 211.57454615971378, Q Loss: 12974259.9609375, Actor Loss: -197043.6533203125
Episode 9352: Time: 0.1640012264251709, Total Reward: 91.15526939678874, Q Loss: 6365249.40625, Actor Loss: -85897.74951171875
Episode 9353: Time: 0.1492149829864502, Total Reward: 80.7348135457686, Q Loss: 6788687.03125, Actor Loss: -78281.64111328125
Episode 9354: Time: 0.38658881187438965, Total Reward: 230.642611209093, Q Loss: 14866967.6875, Actor Loss: -210235.5908203125
Episode 9355: Time: 1.025299310684204, Total Reward: 630.0998755294518, Q Loss: 35623714.15625, Actor Loss: -560340.177734375
Episode 9356: Time: 0.5793728828430176, Total Reward: 351.56695404958015, Q Loss: 20724829.5078125, Actor Loss: -311698.9775390625
Episode 9357: Time: 0.23851919174194336, Total Reward: 136.81809591143443, Q Loss: 7810735.1171875, Actor Loss: -128189.81005859375
Episode 9358: Time: 0.32702064514160156, Total Reward: 193.9771921952486, Q Loss: 10016871.984375, Actor Loss: -173824.64892578125
Episode 9359: Time: 0.40212488174438477, Total Reward: 239.9344298840037, Q Loss: 15174190.234375, Actor Loss: -217650.69091796875
Episode 9360: Time: 0.4314141273498535, Total Reward: 258.6069302229751, Q Loss: 16722539.515625, Actor Loss: -227175.47607421875
Episode 9361: Time: 0.4462466239929199, Total Reward: 267.84219957509396, Q Loss: 15145320.53125, Actor Loss: -240350.0029296875
Episode 9362: Time: 0.3865668773651123, Total Reward: 230.49087044654453, Q Loss: 13270534.3203125, Actor Loss: -209960.828125
Episode 9363: Time: 0.6828162670135498, Total Reward: 415.1227782281789, Q Loss: 28473572.5, Actor Loss: -371441.01123046875
Episode 9364: Time: 0.5348978042602539, Total Reward: 323.85099518357623, Q Loss: 20924577.359375, Actor Loss: -293269.68310546875
Episode 9365: Time: 0.5206103324890137, Total Reward: 315.2703359991955, Q Loss: 17830564.90625, Actor Loss: -288280.7763671875
Episode 9366: Time: 0.7876842021942139, Total Reward: 479.50409179568715, Q Loss: 27685080.859375, Actor Loss: -430958.6826171875
Episode 9367: Time: 0.8167614936828613, Total Reward: 501.27094541633426, Q Loss: 29517802.9296875, Actor Loss: -437152.79052734375
Episode 9368: Time: 0.2686152458190918, Total Reward: 156.30014279799997, Q Loss: 11063665.890625, Actor Loss: -146725.0751953125
Episode 9369: Time: 0.4013681411743164, Total Reward: 239.2828069187913, Q Loss: 16908287.171875, Actor Loss: -221640.74560546875
Episode 9370: Time: 0.32712340354919434, Total Reward: 193.96969066638357, Q Loss: 13440918.859375, Actor Loss: -184154.35107421875

Episode 9371: Time: 2.835911750793457, Total Reward: 1765.6334896167182, Q Loss: 114189256.5625, Actor Loss: -1570165.1342773438
Episode 9372: Time: 0.9647610187530518, Total Reward: 592.7795707320766, Q Loss: 41839751.8359375, Actor Loss: -532741.8291015625
Episode 9373: Time: 0.4456136226654053, Total Reward: 268.54191926772813, Q Loss: 16252961.890625, Actor Loss: -245129.64453125
Episode 9374: Time: 0.238145112991333, Total Reward: 137.67707319707998, Q Loss: 10854123.8125, Actor Loss: -126032.11279296875
Episode 9375: Time: 0.22335577011108398, Total Reward: 128.56010592761032, Q Loss: 7997728.9375, Actor Loss: -122257.93017578125
Episode 9376: Time: 0.35655999183654785, Total Reward: 212.57665160561697, Q Loss: 15896237.359375, Actor Loss: -197099.919921875
Episode 9377: Time: 0.5937812328338623, Total Reward: 360.8810976250406, Q Loss: 24786203.890625, Actor Loss: -320746.84130859375
Episode 9378: Time: 0.311781644821167, Total Reward: 184.20785196317203, Q Loss: 13979601.375, Actor Loss: -166088.8466796875
Episode 9379: Time: 0.37165379524230957, Total Reward: 221.31796689361204, Q Loss: 13438791.34375, Actor Loss: -206972.255859375
Episode 9380: Time: 0.889937162399292, Total Reward: 547.9733864627101, Q Loss: 33121495.25, Actor Loss: -481663.57080078125
Episode 9381: Time: 0.16369915008544922, Total Reward: 91.1705038425178, Q Loss: 8074020.0625, Actor Loss: -92070.78369140625
Episode 9382: Time: 0.22324061393737793, Total Reward: 128.64097983410036, Q Loss: 5898860.3984375, Actor Loss: -123471.8720703125
Episode 9383: Time: 0.1340775489807129, Total Reward: 72.18790131675718, Q Loss: 5590484.375, Actor Loss: -76623.8447265625
Episode 9384: Time: 0.4603433609008789, Total Reward: 277.6692527997737, Q Loss: 19711727.859375, Actor Loss: -254208.36962890625
Episode 9385: Time: 1.0686616897583008, Total Reward: 660.2158757281771, Q Loss: 38996421.78125, Actor Loss: -579070.09375
Episode 9386: Time: 0.40166497230529785, Total Reward: 237.581896098945, Q Loss: 14174992.2734375, Actor Loss: -210517.2666015625
Episode 9387: Time: 0.2977261543273926, Total Reward: 175.23574070356773, Q Loss: 10850953.8984375, Actor Loss: -165300.29931640625
Episode 9388: Time: 0.5647590160369873, Total Reward: 341.0807867155824, Q Loss: 19005676.46875, Actor Loss: -315664.634765625
Episode 9389: Time: 0.08953404426574707, Total Reward: 44.63194856564036, Q Loss: 3596912.03125, Actor Loss: -48690.703125
Episode 9390: Time: 0.9493618011474609, Total Reward: 583.9387826848708, Q Loss: 37574988.3046875, Actor Loss: -522779.8837890625
Episode 9391: Time: 0.3869645595550537, Total Reward: 230.21862673912625, Q Loss: 14432579.515625, Actor Loss: -221068.283203125
Episode 9392: Time: 0.28249692916870117, Total Reward: 165.6258138004758, Q Loss: 9475191.3125, Actor Loss: -156363.65185546875
Episode 9393: Time: 0.8315973281860352, Total Reward: 510.22332145670117, Q Loss: 31683739.328125, Actor Loss: -473994.8720703125
Episode 9394: Time: 0.46067023277282715, Total Reward: 276.33359936152505, Q Loss: 15554421.71875, Actor Loss: -253766.01171875
Episode 9395: Time: 0.3274986743927002, Total Reward: 193.12852750537272, Q Loss: 15589038.75, Actor Loss: -179856.3447265625
Episode 9396: Time: 0.446397066116333, Total Reward: 268.15946420463945, Q Loss: 19226302.171875, Actor Loss: -244431.3896484375
Episode 9397: Time: 0.47487306594848633, Total Reward: 285.7226972751613, Q Loss: 13548053.1875, Actor Loss: -256889.6181640625
Episode 9398: Time: 0.5493571758270264, Total Reward: 331.9191198195907, Q Loss: 21859701.96875, Actor Loss: -295300.60791015625

Episode 9399: Time: 1.0098555088043213, Total Reward: 619.5886785344984, Q Loss: 39067377.984375, Actor Loss: -565414.9853515625
Validation Mean: 9350.728932025133, Validation Std: 0.2087219201876628
saving model
Episode 9400: Time: 0.35921621322631836, Total Reward: 211.39556570230747, Q Loss: 13077204.6640625, Actor Loss: -200578.00146484375
Episode 9401: Time: 0.4760715961456299, Total Reward: 284.767834545765, Q Loss: 19586576.359375, Actor Loss: -258843.39892578125
Episode 9402: Time: 0.17863678932189941, Total Reward: 99.77932955844015, Q Loss: 8394786.9375, Actor Loss: -99647.693359375
Episode 9403: Time: 0.4312887191772461, Total Reward: 257.2882827222553, Q Loss: 20752832.453125, Actor Loss: -236737.1015625
Episode 9404: Time: 0.3866915702819824, Total Reward: 230.6240968908711, Q Loss: 16116121.671875, Actor Loss: -212468.87646484375
Episode 9405: Time: 0.9339003562927246, Total Reward: 574.225853448766, Q Loss: 40952443.296875, Actor Loss: -515308.0048828125
Episode 9406: Time: 1.0391664505004883, Total Reward: 640.1443211385736, Q Loss: 44326539.828125, Actor Loss: -582416.7543945312
Episode 9407: Time: 0.357074499130249, Total Reward: 212.5417774026463, Q Loss: 14736885.34375, Actor Loss: -198596.1123046875
Episode 9408: Time: 0.2086470127105713, Total Reward: 117.93881929502805, Q Loss: 9040680.28125, Actor Loss: -119101.55419921875
Episode 9409: Time: 0.2825632095336914, Total Reward: 166.02628011985357, Q Loss: 11498928.515625, Actor Loss: -158896.21875
Episode 9410: Time: 0.16338491439819336, Total Reward: 90.88620234009908, Q Loss: 5417427.28125, Actor Loss: -90282.95263671875
Episode 9411: Time: 0.23810052871704102, Total Reward: 137.62794741199622, Q Loss: 8153926.875, Actor Loss: -131913.830078125
Episode 9412: Time: 1.2621119022369385, Total Reward: 779.6544264280324, Q Loss: 53080792.765625, Actor Loss: -703128.6293945312
Episode 9413: Time: 0.7436394691467285, Total Reward: 454.47538060067575, Q Loss: 29640325.46875, Actor Loss: -414906.59521484375
Episode 9414: Time: 0.28350043296813965, Total Reward: 165.50836497844986, Q Loss: 13894541.296875, Actor Loss: -159173.3857421875
Episode 9415: Time: 0.49047398567199707, Total Reward: 295.18609975051123, Q Loss: 18775014.7265625, Actor Loss: -269856.1474609375
Episode 9416: Time: 0.1788027286529541, Total Reward: 100.13509666840197, Q Loss: 6048051.90625, Actor Loss: -98506.7001953125
Episode 9417: Time: 1.6032092571258545, Total Reward: 994.8135261211042, Q Loss: 62934214.40625, Actor Loss: -898594.0278320312
Episode 9418: Time: 0.1637725830078125, Total Reward: 90.20221298819759, Q Loss: 6333629.1875, Actor Loss: -91374.37353515625
Episode 9419: Time: 0.4903585910797119, Total Reward: 296.93473029716057, Q Loss: 16204027.484375, Actor Loss: -275204.70263671875
Episode 9420: Time: 0.6094391345977783, Total Reward: 369.52080427285466, Q Loss: 24082361.8125, Actor Loss: -335299.59765625
Episode 9421: Time: 0.31366825103759766, Total Reward: 184.0434606415359, Q Loss: 8936698.078125, Actor Loss: -173794.68212890625
Episode 9422: Time: 0.31249284744262695, Total Reward: 183.4512777446577, Q Loss: 13956208.21875, Actor Loss: -175015.759765625
Episode 9423: Time: 0.5197715759277344, Total Reward: 313.5647808388815, Q Loss: 20590079.046875, Actor Loss: -287587.529296875
Episode 9424: Time: 0.5196728706359863, Total Reward: 313.92325885854115, Q Loss: 23103951.09375, Actor Loss: -284684.861328125
Episode 9425: Time: 0.44503092765808105, Total Reward: 267.39567211399697, Q Loss: 15280752.046875, Actor Loss: -245772.23974609375

Episode 9426: Time: 0.4753715991973877, Total Reward: 286.70387256983133, Q Loss: 21459258.796875, Actor Loss: -269581.9501953125
Episode 9427: Time: 0.3572235107421875, Total Reward: 212.4688150489183, Q Loss: 12434140.421875, Actor Loss: -201895.20361328125
Episode 9428: Time: 0.40143299102783203, Total Reward: 238.94409123865768, Q Loss: 16420301.421875, Actor Loss: -223471.77734375
Episode 9429: Time: 0.6398873329162598, Total Reward: 387.5023710301655, Q Loss: 26265234.828125, Actor Loss: -355731.71142578125
Episode 9430: Time: 0.9066808223724365, Total Reward: 557.133149368105, Q Loss: 40149010.578125, Actor Loss: -513476.96337890625
Episode 9431: Time: 0.25458431243896484, Total Reward: 146.08406183667853, Q Loss: 11298956.265625, Actor Loss: -141410.63134765625
Episode 9432: Time: 0.6100287437438965, Total Reward: 370.1585761365085, Q Loss: 30155844.953125, Actor Loss: -347449.130859375
Episode 9433: Time: 0.3129994869232178, Total Reward: 183.54539901317054, Q Loss: 15631832.875, Actor Loss: -173112.5087890625
Episode 9434: Time: 0.4311645030975342, Total Reward: 258.7170139078534, Q Loss: 19406408.546875, Actor Loss: -243269.2060546875
Episode 9435: Time: 0.29764437675476074, Total Reward: 173.16624984473478, Q Loss: 14897880.890625, Actor Loss: -162068.38916015625
Episode 9436: Time: 2.094238758087158, Total Reward: 1302.2509680583703, Q Loss: 82761101.46875, Actor Loss: -1184394.77734375
Episode 9437: Time: 0.3870885372161865, Total Reward: 230.55071219423567, Q Loss: 14044215.3125, Actor Loss: -221260.18603515625
Episode 9438: Time: 0.4471099376678467, Total Reward: 266.7236353249377, Q Loss: 20273691.734375, Actor Loss: -247544.09765625
Episode 9439: Time: 0.3421168327331543, Total Reward: 202.68002130232725, Q Loss: 13847441.296875, Actor Loss: -189111.62060546875
Episode 9440: Time: 0.19366717338562012, Total Reward: 109.72456770406373, Q Loss: 11538968.78125, Actor Loss: -109236.080078125
Episode 9441: Time: 0.11959505081176758, Total Reward: 62.844512514781265, Q Loss: 3978301.40625, Actor Loss: -64481.42236328125
Episode 9442: Time: 0.34219980239868164, Total Reward: 203.16945681587768, Q Loss: 14127131.25, Actor Loss: -191287.14306640625
Episode 9443: Time: 0.7581093311309814, Total Reward: 460.63980380972623, Q Loss: 29990126.7265625, Actor Loss: -421128.4921875
Episode 9444: Time: 0.3574228286743164, Total Reward: 211.28911655797012, Q Loss: 15154178.75, Actor Loss: -201423.51513671875
Episode 9445: Time: 0.7572622299194336, Total Reward: 461.5251057288125, Q Loss: 30992739.28125, Actor Loss: -430097.611328125
Episode 9446: Time: 0.6085045337677002, Total Reward: 369.198286384269, Q Loss: 23033557.828125, Actor Loss: -344637.55224609375
Episode 9447: Time: 0.6822206974029541, Total Reward: 417.137482927166, Q Loss: 32292482.234375, Actor Loss: -390657.09521484375
Episode 9448: Time: 0.43109846115112305, Total Reward: 258.8333545237362, Q Loss: 16673253.0, Actor Loss: -247348.3310546875
Episode 9449: Time: 0.5214521884918213, Total Reward: 312.9134709642131, Q Loss: 26944499.078125, Actor Loss: -287601.90966796875
Episode 9450: Time: 0.7421560287475586, Total Reward: 454.1899591797247, Q Loss: 27094550.5, Actor Loss: -423921.51708984375
Episode 9451: Time: 0.2677114009857178, Total Reward: 156.78656621786342, Q Loss: 10905235.15625, Actor Loss: -149236.1875
Episode 9452: Time: 0.17868494987487793, Total Reward: 100.40529571586733, Q Loss: 10184203.9375, Actor Loss: -99825.22265625
Episode 9453: Time: 0.7290403842926025, Total Reward: 444.5207945142358, Q Loss: 36743934.6875, Actor Loss: -415823.177734375

Episode 9454: Time: 0.9502532482147217, Total Reward: 584.6920604357177, Q Loss: 32603751.453125, Actor Loss: -534607.1567382812
Episode 9455: Time: 0.29769134521484375, Total Reward: 173.7739426066521, Q Loss: 11014314.8046875, Actor Loss: -170902.5634765625
Episode 9456: Time: 0.23834681510925293, Total Reward: 138.24472805991272, Q Loss: 10662353.0, Actor Loss: -134285.13134765625
Episode 9457: Time: 0.40204477310180664, Total Reward: 237.05076225017456, Q Loss: 18214230.796875, Actor Loss: -231981.984375
Episode 9458: Time: 0.43151378631591797, Total Reward: 259.32820025593963, Q Loss: 18273036.71875, Actor Loss: -241333.7021484375
Episode 9459: Time: 0.4315218925476074, Total Reward: 258.9646011272439, Q Loss: 17603710.3125, Actor Loss: -241880.88916015625
Episode 9460: Time: 0.13421177864074707, Total Reward: 72.95949867487857, Q Loss: 4195476.484375, Actor Loss: -75751.5234375
Episode 9461: Time: 0.357327938079834, Total Reward: 211.30719815827112, Q Loss: 13343893.859375, Actor Loss: -201686.3671875
Episode 9462: Time: 0.32726192474365234, Total Reward: 192.95390632936932, Q Loss: 15911596.09375, Actor Loss: -186233.22314453125
Episode 9463: Time: 0.49020886421203613, Total Reward: 295.1618048415177, Q Loss: 19455312.46875, Actor Loss: -274787.32568359375
Episode 9464: Time: 0.3274054527282715, Total Reward: 192.84997642048046, Q Loss: 16012974.265625, Actor Loss: -186421.8994140625
Episode 9465: Time: 0.6239931583404541, Total Reward: 379.19118763911416, Q Loss: 27553918.203125, Actor Loss: -356552.6064453125
Episode 9466: Time: 0.59415602684021, Total Reward: 358.8429571464018, Q Loss: 22836492.5, Actor Loss: -339274.70947265625
Episode 9467: Time: 0.44608545303344727, Total Reward: 267.9888516173926, Q Loss: 17801354.328125, Actor Loss: -254232.38232421875
Episode 9468: Time: 0.47624945640563965, Total Reward: 285.38979265032884, Q Loss: 20177167.203125, Actor Loss: -270494.97509765625
Episode 9469: Time: 0.550649881362915, Total Reward: 333.13487996824267, Q Loss: 21863179.90625, Actor Loss: -311226.203125
Episode 9470: Time: 1.0252580642700195, Total Reward: 629.8585195281156, Q Loss: 38919918.2421875, Actor Loss: -574626.6572265625
Episode 9471: Time: 0.3721039295196533, Total Reward: 221.6255270005045, Q Loss: 18146963.5625, Actor Loss: -211152.43212890625
Episode 9472: Time: 0.6543674468994141, Total Reward: 399.09801380185337, Q Loss: 24572597.3125, Actor Loss: -366895.6923828125
Episode 9473: Time: 0.476146936416626, Total Reward: 285.01754506640214, Q Loss: 19388702.359375, Actor Loss: -272142.6689453125
Episode 9474: Time: 0.29755449295043945, Total Reward: 174.54565661261714, Q Loss: 14816860.828125, Actor Loss: -170164.88671875
Episode 9475: Time: 1.172825813293457, Total Reward: 723.8450206725291, Q Loss: 48111576.78125, Actor Loss: -667116.4169921875
Episode 9476: Time: 0.8909575939178467, Total Reward: 545.0254861404301, Q Loss: 37231304.1328125, Actor Loss: -494290.13916015625
Episode 9477: Time: 0.2828679084777832, Total Reward: 165.01141603499286, Q Loss: 12648543.609375, Actor Loss: -158626.1728515625
Episode 9478: Time: 0.19328689575195312, Total Reward: 109.93785344525921, Q Loss: 8075760.59375, Actor Loss: -108982.8203125
Episode 9479: Time: 0.17947769165039062, Total Reward: 100.27261675607535, Q Loss: 7563274.453125, Actor Loss: -101463.123046875
Episode 9480: Time: 1.6340584754943848, Total Reward: 1011.3357315238178, Q Loss: 66702867.84375, Actor Loss: -939750.453125
Episode 9481: Time: 0.14898133277893066, Total Reward: 81.59289401130515, Q Loss: 6823345.734375, Actor Loss: -84673.22412109375

Episode 9482: Time: 0.3129429817199707, Total Reward: 184.36797950861848, Q Loss: 12353282.296875, Actor Loss: -185705.10791015625
Episode 9483: Time: 0.17882633209228516, Total Reward: 100.26020685597359, Q Loss: 10112583.890625, Actor Loss: -100751.650390625
Episode 9484: Time: 0.5209777355194092, Total Reward: 314.60072582644943, Q Loss: 20252026.0625, Actor Loss: -302588.02294921875
Episode 9485: Time: 0.5346989631652832, Total Reward: 322.56498962867727, Q Loss: 22136402.484375, Actor Loss: -311492.72119140625
Episode 9486: Time: 0.3270442485809326, Total Reward: 193.6268069109194, Q Loss: 11997281.765625, Actor Loss: -186042.98486328125
Episode 9487: Time: 0.4902048110961914, Total Reward: 295.33668709872916, Q Loss: 21513020.703125, Actor Loss: -281141.73974609375
Episode 9488: Time: 0.2679882049560547, Total Reward: 155.5118005476168, Q Loss: 11261152.3125, Actor Loss: -151853.2109375
Episode 9489: Time: 0.7137818336486816, Total Reward: 435.596535091719, Q Loss: 28360116.046875, Actor Loss: -408329.16748046875
Episode 9490: Time: 1.558455228805542, Total Reward: 968.1869263346256, Q Loss: 58089588.625, Actor Loss: -896490.2705078125
Episode 9491: Time: 0.7575931549072266, Total Reward: 463.3904079624561, Q Loss: 30086685.453125, Actor Loss: -436848.22216796875
Episode 9492: Time: 0.47539663314819336, Total Reward: 285.8148781944771, Q Loss: 19438453.75, Actor Loss: -271543.03759765625
Episode 9493: Time: 0.34261393547058105, Total Reward: 202.66022161544475, Q Loss: 14254208.71875, Actor Loss: -193297.51123046875
Episode 9494: Time: 0.19360947608947754, Total Reward: 109.85276999790159, Q Loss: 6716051.375, Actor Loss: -115974.865234375
Episode 9495: Time: 0.23798155784606934, Total Reward: 138.1332226617704, Q Loss: 7096448.78125, Actor Loss: -131662.462890625
Episode 9496: Time: 0.16341352462768555, Total Reward: 91.0747398381655, Q Loss: 5936128.59375, Actor Loss: -98535.5009765625
Episode 9497: Time: 0.14932489395141602, Total Reward: 81.82238709142611, Q Loss: 5137544.59375, Actor Loss: -85756.30810546875
Episode 9498: Time: 0.13383793830871582, Total Reward: 72.88030921440594, Q Loss: 4168080.296875, Actor Loss: -74181.83251953125
Episode 9499: Time: 0.6677296161651611, Total Reward: 407.5487160897595, Q Loss: 27468088.453125, Actor Loss: -390291.46533203125
Validation Mean: 9350.114686755254, Validation Std: 0.2678101041030884
saving model
Episode 9500: Time: 0.40328049659729004, Total Reward: 240.0462985439462, Q Loss: 16042872.0, Actor Loss: -229968.28271484375
Episode 9501: Time: 0.4174010753631592, Total Reward: 248.16312613261306, Q Loss: 16906246.03125, Actor Loss: -237958.2265625
Episode 9502: Time: 0.34259462356567383, Total Reward: 202.8741023348353, Q Loss: 12450561.59375, Actor Loss: -196240.8623046875
Episode 9503: Time: 0.3876817226409912, Total Reward: 231.17951524539032, Q Loss: 14702294.625, Actor Loss: -218840.49365234375
Episode 9504: Time: 0.17875075340270996, Total Reward: 100.62028106898484, Q Loss: 8156786.515625, Actor Loss: -102309.20947265625
Episode 9505: Time: 0.5352544784545898, Total Reward: 323.0384394008547, Q Loss: 24492864.015625, Actor Loss: -311800.64404296875
Episode 9506: Time: 0.6401901245117188, Total Reward: 389.08107366202364, Q Loss: 26465645.5, Actor Loss: -372956.3046875
Episode 9507: Time: 0.4912095069885254, Total Reward: 296.6156672395603, Q Loss: 20678617.265625, Actor Loss: -290141.181640625
Episode 9508: Time: 0.5805079936981201, Total Reward: 350.1786654198344, Q Loss: 26423925.671875, Actor Loss: -332785.27392578125

Episode 9509: Time: 0.4322121143410645, Total Reward: 258.449182042613, Q Loss: 18625854.5859375, Actor Loss: -249479.615234375
Episode 9510: Time: 0.14916229248046875, Total Reward: 81.74600375622695, Q Loss: 6705723.7109375, Actor Loss: -81715.1513671875
Episode 9511: Time: 0.9945077896118164, Total Reward: 611.833630850601, Q Loss: 44325293.859375, Actor Loss: -582641.3198242188
Episode 9512: Time: 0.5796592235565186, Total Reward: 351.7038495318435, Q Loss: 20005818.609375, Actor Loss: -345833.11572265625
Episode 9513: Time: 0.13405299186706543, Total Reward: 72.94575344080185, Q Loss: 4250867.4921875, Actor Loss: -74275.4853515625
Episode 9514: Time: 0.6391124725341797, Total Reward: 388.9230431542876, Q Loss: 24308172.2109375, Actor Loss: -368556.375
Episode 9515: Time: 0.3121669292449951, Total Reward: 184.31029267777598, Q Loss: 16008382.515625, Actor Loss: -179591.15625
Episode 9516: Time: 0.5500564575195312, Total Reward: 332.8958893133582, Q Loss: 26365695.90625, Actor Loss: -316638.80224609375
Episode 9517: Time: 0.2982780933380127, Total Reward: 174.85423330354186, Q Loss: 9198533.890625, Actor Loss: -170183.95654296875
Episode 9518: Time: 0.2235562801361084, Total Reward: 128.68107313731667, Q Loss: 7032972.03125, Actor Loss: -130879.4091796875
Episode 9519: Time: 0.6997096538543701, Total Reward: 424.05080469157303, Q Loss: 28485728.03125, Actor Loss: -421232.64990234375
Episode 9520: Time: 0.7879741191864014, Total Reward: 481.98769659584417, Q Loss: 37240044.921875, Actor Loss: -465515.380859375
Episode 9521: Time: 0.10445451736450195, Total Reward: 53.728349812060095, Q Loss: 3616844.453125, Actor Loss: -60719.33935546875
Episode 9522: Time: 0.37209486961364746, Total Reward: 221.87758224192078, Q Loss: 15847419.6171875, Actor Loss: -213331.00439453125
Episode 9523: Time: 0.8921592235565186, Total Reward: 545.150551146923, Q Loss: 39684529.515625, Actor Loss: -518292.783203125
Episode 9524: Time: 1.1610009670257568, Total Reward: 714.7163913026726, Q Loss: 40091044.4375, Actor Loss: -670466.6547851562
Episode 9525: Time: 0.5810184478759766, Total Reward: 352.36770970476834, Q Loss: 22117054.21875, Actor Loss: -336985.03857421875
Episode 9526: Time: 1.3384010791778564, Total Reward: 826.6870837848192, Q Loss: 63604747.796875, Actor Loss: -769908.349609375
Episode 9527: Time: 0.7734320163726807, Total Reward: 473.67878802245014, Q Loss: 27851398.8125, Actor Loss: -452149.14990234375
Episode 9528: Time: 0.2975740432739258, Total Reward: 175.08071660621283, Q Loss: 12823661.984375, Actor Loss: -169866.244140625
Episode 9529: Time: 0.6249403953552246, Total Reward: 379.6560515169753, Q Loss: 25688676.453125, Actor Loss: -365791.38623046875
Episode 9530: Time: 0.13416266441345215, Total Reward: 72.14273492194569, Q Loss: 4449197.5, Actor Loss: -76065.26611328125
Episode 9531: Time: 0.5954747200012207, Total Reward: 361.36583082913296, Q Loss: 21623774.1484375, Actor Loss: -348738.55322265625
Episode 9532: Time: 0.17887330055236816, Total Reward: 100.66919078210962, Q Loss: 11490957.6875, Actor Loss: -104987.755859375
Episode 9533: Time: 0.8773479461669922, Total Reward: 538.1764065039924, Q Loss: 39810228.203125, Actor Loss: -516197.8994140625
Episode 9534: Time: 0.8486859798431396, Total Reward: 518.8345162958167, Q Loss: 41406598.828125, Actor Loss: -498912.3642578125
Episode 9535: Time: 0.1489267349243164, Total Reward: 81.71630631950092, Q Loss: 7214576.03125, Actor Loss: -88994.1806640625
Episode 9536: Time: 0.3726341724395752, Total Reward: 219.99358274045272, Q Loss: 20330083.625, Actor Loss: -215308.55029296875

Episode 9537: Time: 0.4168875217437744, Total Reward: 248.17498220748993, Q
Loss: 20778634.859375, Actor Loss: -243725.14111328125
Episode 9538: Time: 0.38705015182495117, Total Reward: 231.30681803612063, Q
Loss: 17464474.859375, Actor Loss: -228831.00146484375
Episode 9539: Time: 0.25447964668273926, Total Reward: 147.3173231410605, Q
Loss: 11062192.390625, Actor Loss: -146398.08935546875
Episode 9540: Time: 0.6695446968078613, Total Reward: 406.3062287032684, Q L
oss: 28149895.640625, Actor Loss: -387176.50537109375
Episode 9541: Time: 1.1591644287109375, Total Reward: 715.6025802488929, Q L
oss: 52073792.5625, Actor Loss: -694394.09375
Episode 9542: Time: 0.5200963020324707, Total Reward: 314.58697311305167, Q
Loss: 24383146.0, Actor Loss: -304195.185546875
Episode 9543: Time: 0.3428528308868408, Total Reward: 202.49774776501465, Q
Loss: 18570853.59375, Actor Loss: -202464.1083984375
Episode 9544: Time: 0.282987117767334, Total Reward: 165.12260869415465, Q L
oss: 11336936.78125, Actor Loss: -161268.26953125
Episode 9545: Time: 0.47577357292175293, Total Reward: 285.51764539697797, Q
Loss: 19865905.125, Actor Loss: -278417.0654296875
Episode 9546: Time: 0.2383115291595459, Total Reward: 137.87361911992969, Q
Loss: 11249146.40625, Actor Loss: -141889.40283203125
Episode 9547: Time: 1.277238368988037, Total Reward: 788.4902263066061, Q Lo
ss: 54291772.78125, Actor Loss: -755669.0795898438
Episode 9548: Time: 0.4459853172302246, Total Reward: 266.7589827073286, Q L
oss: 17689445.640625, Actor Loss: -268717.31884765625
Episode 9549: Time: 0.1934354305267334, Total Reward: 109.39617189395948, Q
Loss: 8036038.46875, Actor Loss: -114085.708984375
Episode 9550: Time: 0.23859858512878418, Total Reward: 137.85381661975288, Q
Loss: 11720490.1875, Actor Loss: -141421.84375
Episode 9551: Time: 0.5942220687866211, Total Reward: 360.1476358739375, Q L
oss: 28792533.1875, Actor Loss: -335817.4990234375
Episode 9552: Time: 0.5349256992340088, Total Reward: 323.89074304382734, Q
Loss: 30087589.15625, Actor Loss: -314636.70458984375
Episode 9553: Time: 0.4168410301208496, Total Reward: 248.18896876640048, Q
Loss: 18206829.90625, Actor Loss: -245462.08349609375
Episode 9554: Time: 0.3426687717437744, Total Reward: 202.8681372722041, Q L
oss: 10824396.03125, Actor Loss: -202742.69921875
Episode 9555: Time: 0.43111324310302734, Total Reward: 258.964829490133, Q L
oss: 17485274.4140625, Actor Loss: -254431.20654296875
Episode 9556: Time: 0.16367220878601074, Total Reward: 90.67142541557033, Q
Loss: 8680814.90625, Actor Loss: -97096.689453125
Episode 9557: Time: 0.876359224319458, Total Reward: 537.9706605874898, Q Lo
ss: 43134148.5625, Actor Loss: -514822.89306640625
Episode 9558: Time: 0.3122999668121338, Total Reward: 183.83874557782937, Q
Loss: 15093951.578125, Actor Loss: -187577.908203125
Episode 9559: Time: 0.2093064785003662, Total Reward: 118.89696077958834, Q
Loss: 11269849.28125, Actor Loss: -118837.767578125
Episode 9560: Time: 0.9641070365905762, Total Reward: 592.3097525673563, Q L
oss: 43846343.25, Actor Loss: -559054.326171875
Episode 9561: Time: 0.28235554695129395, Total Reward: 165.43231703378535, Q
Loss: 15176089.53125, Actor Loss: -171897.71728515625
Episode 9562: Time: 0.17851662635803223, Total Reward: 101.0005449610816, Q
Loss: 6536317.3125, Actor Loss: -106790.326171875
Episode 9563: Time: 0.5647573471069336, Total Reward: 340.07346878822693, Q
Loss: 30100676.203125, Actor Loss: -331671.82666015625
Episode 9564: Time: 0.4755442142486572, Total Reward: 284.60453951213265, Q
Loss: 20988224.109375, Actor Loss: -281198.896484375

Episode 9565: Time: 0.2680642604827881, Total Reward: 154.35949063564686, Q Loss: 14416907.84375, Actor Loss: -158299.52392578125
Episode 9566: Time: 0.22311878204345703, Total Reward: 128.8023978210805, Q Loss: 10611632.6875, Actor Loss: -134478.5791015625
Episode 9567: Time: 0.26802802085876465, Total Reward: 155.91864129187616, Q Loss: 9595476.796875, Actor Loss: -157814.43017578125
Episode 9568: Time: 0.40171241760253906, Total Reward: 241.05098142957902, Q Loss: 16186799.921875, Actor Loss: -240365.98193359375
Episode 9569: Time: 0.6549723148345947, Total Reward: 397.81736677845373, Q Loss: 28467198.328125, Actor Loss: -388284.54052734375
Episode 9570: Time: 0.3872683048248291, Total Reward: 231.3556262197683, Q Loss: 16699276.84375, Actor Loss: -223948.798828125
Episode 9571: Time: 0.23897099494934082, Total Reward: 136.55043188068683, Q Loss: 7797358.90625, Actor Loss: -142425.365234375
Episode 9572: Time: 0.26810693740844727, Total Reward: 155.50570082069748, Q Loss: 13677200.328125, Actor Loss: -155477.982421875
Episode 9573: Time: 0.2232201099395752, Total Reward: 128.50582024912458, Q Loss: 10500790.0625, Actor Loss: -135428.53369140625
Episode 9574: Time: 0.505542516708374, Total Reward: 305.21334983343775, Q Loss: 19597770.90625, Actor Loss: -299244.2685546875
Episode 9575: Time: 0.4307737350463867, Total Reward: 258.6995861091687, Q Loss: 17586924.71875, Actor Loss: -255657.783203125
Episode 9576: Time: 0.22359132766723633, Total Reward: 127.87535519268106, Q Loss: 11529910.0625, Actor Loss: -130292.26025390625
Episode 9577: Time: 0.6240711212158203, Total Reward: 377.3259427508016, Q Loss: 29755660.703125, Actor Loss: -365263.90185546875
Episode 9578: Time: 0.6834266185760498, Total Reward: 416.2992502120608, Q Loss: 35724960.890625, Actor Loss: -413753.84423828125
Episode 9579: Time: 0.46099352836608887, Total Reward: 276.8364832413137, Q Loss: 20158579.390625, Actor Loss: -280594.22314453125
Episode 9580: Time: 1.2464885711669922, Total Reward: 771.6073207981436, Q Loss: 58406558.890625, Actor Loss: -745200.2797851562
Episode 9581: Time: 0.13407373428344727, Total Reward: 72.27901832087588, Q Loss: 6609742.625, Actor Loss: -80203.57861328125
Episode 9582: Time: 0.3719785213470459, Total Reward: 221.89864283284373, Q Loss: 14779876.390625, Actor Loss: -223055.85888671875
Episode 9583: Time: 0.5796170234680176, Total Reward: 349.73010891731485, Q Loss: 31143621.0, Actor Loss: -345086.86865234375
Episode 9584: Time: 0.8770608901977539, Total Reward: 537.9511149339513, Q Loss: 37574305.140625, Actor Loss: -523904.70751953125
Episode 9585: Time: 0.38736820220947266, Total Reward: 230.71146181683767, Q Loss: 21206734.3125, Actor Loss: -231699.09814453125
Episode 9586: Time: 0.32803916931152344, Total Reward: 192.99333669117192, Q Loss: 12530279.453125, Actor Loss: -197173.9130859375
Episode 9587: Time: 0.11930155754089355, Total Reward: 63.112589267170314, Q Loss: 5393098.78125, Actor Loss: -69949.49755859375
Episode 9588: Time: 0.2830944061279297, Total Reward: 165.24566118411272, Q Loss: 13548955.53125, Actor Loss: -164671.36865234375
Episode 9589: Time: 0.13431715965270996, Total Reward: 72.93474645774299, Q Loss: 5653710.953125, Actor Loss: -76152.74853515625
Episode 9590: Time: 0.16437625885009766, Total Reward: 90.68129091670761, Q Loss: 6431180.8125, Actor Loss: -100326.25390625
Episode 9591: Time: 0.7294549942016602, Total Reward: 445.25170465855405, Q Loss: 34300411.328125, Actor Loss: -432682.921875
Episode 9592: Time: 0.2981836795806885, Total Reward: 175.5831110019619, Q Loss: 15216049.03125, Actor Loss: -184928.84619140625

Episode 9593: Time: 0.8493514060974121, Total Reward: 517.6199410000902, Q Loss: 43832461.09375, Actor Loss: -515366.298828125
Episode 9594: Time: 0.40117478370666504, Total Reward: 240.44027796348607, Q Loss: 17749637.78125, Actor Loss: -242829.4462890625
Episode 9595: Time: 0.2677891254425049, Total Reward: 156.50313153408428, Q Loss: 11035229.296875, Actor Loss: -153193.78857421875
Episode 9596: Time: 1.0532212257385254, Total Reward: 650.4197571047108, Q Loss: 51245518.984375, Actor Loss: -637314.5439453125
Episode 9597: Time: 0.26786088943481445, Total Reward: 156.72122691615502, Q Loss: 13417627.5, Actor Loss: -167511.30859375
Episode 9598: Time: 0.7136275768280029, Total Reward: 435.8250828535111, Q Loss: 38802671.546875, Actor Loss: -425673.14599609375
Episode 9599: Time: 0.2985405921936035, Total Reward: 174.218352384118, Q Loss: 13030718.453125, Actor Loss: -179444.55712890625
Validation Mean: 9348.76755774455, Validation Std: 0.2530014446265912
saving model
Episode 9600: Time: 0.26938438415527344, Total Reward: 156.31347065928247, Q Loss: 17084207.15625, Actor Loss: -166367.154296875
Episode 9601: Time: 0.40176916122436523, Total Reward: 237.83290788313016, Q Loss: 17006854.4375, Actor Loss: -233169.46142578125
Episode 9602: Time: 0.14914274215698242, Total Reward: 81.4182673943356, Q Loss: 6275230.640625, Actor Loss: -89448.8388671875
Episode 9603: Time: 0.20873236656188965, Total Reward: 119.41694600777727, Q Loss: 7355233.46875, Actor Loss: -125296.7177734375
Episode 9604: Time: 0.31243228912353516, Total Reward: 184.79778702474212, Q Loss: 10717500.71875, Actor Loss: -186562.5390625
Episode 9605: Time: 0.0894474983215332, Total Reward: 44.70348560045761, Q Loss: 7392886.75, Actor Loss: -57923.271484375
Episode 9606: Time: 0.35683369636535645, Total Reward: 212.08220500967298, Q Loss: 12965276.09375, Actor Loss: -211465.779296875
Episode 9607: Time: 0.34210753440856934, Total Reward: 201.6421735650147, Q Loss: 17699415.125, Actor Loss: -203937.91259765625
Episode 9608: Time: 0.5047085285186768, Total Reward: 305.35310449569306, Q Loss: 23453754.875, Actor Loss: -307575.9619140625
Episode 9609: Time: 0.26837587356567383, Total Reward: 156.80545607874978, Q Loss: 12532459.75, Actor Loss: -156638.9228515625
Episode 9610: Time: 0.624030590057373, Total Reward: 378.52723746604886, Q Loss: 26254352.3125, Actor Loss: -375221.3466796875
Episode 9611: Time: 0.1638939380645752, Total Reward: 91.14303220734129, Q Loss: 7159983.78125, Actor Loss: -101423.69921875
Episode 9612: Time: 0.19371700286865234, Total Reward: 109.84250612583254, Q Loss: 8607914.5078125, Actor Loss: -118144.5615234375
Episode 9613: Time: 0.5198476314544678, Total Reward: 315.36832332371273, Q Loss: 26448453.15625, Actor Loss: -313478.611328125
Episode 9614: Time: 0.3283250331878662, Total Reward: 193.2167207320965, Q Loss: 20723984.65625, Actor Loss: -196399.68896484375
Episode 9615: Time: 0.19328641891479492, Total Reward: 110.11702306170704, Q Loss: 8940529.5, Actor Loss: -119862.3095703125
Episode 9616: Time: 0.5938911437988281, Total Reward: 359.74048856167644, Q Loss: 28884699.25, Actor Loss: -355303.30126953125
Episode 9617: Time: 0.6088058948516846, Total Reward: 369.5587925230336, Q Loss: 31907225.03125, Actor Loss: -362717.9111328125
Episode 9618: Time: 0.550898551940918, Total Reward: 331.0508549422853, Q Loss: 23732835.78125, Actor Loss: -328926.8095703125
Episode 9619: Time: 0.7577803134918213, Total Reward: 464.2513974775471, Q Loss: 38623268.015625, Actor Loss: -452985.20654296875

Episode 9620: Time: 0.14911961555480957, Total Reward: 81.97420807459117, Q Loss: 6150765.828125, Actor Loss: -92828.0029296875
Episode 9621: Time: 0.34239768981933594, Total Reward: 202.88163107453838, Q Loss: 15389890.15625, Actor Loss: -210709.69873046875
Episode 9622: Time: 0.40149521827697754, Total Reward: 238.00490063720483, Q Loss: 21172741.8125, Actor Loss: -235304.81884765625
Episode 9623: Time: 0.7425260543823242, Total Reward: 453.37354264825854, Q Loss: 37007211.0, Actor Loss: -444461.81201171875
Episode 9624: Time: 0.8023285865783691, Total Reward: 489.2528438785625, Q Loss: 38926766.234375, Actor Loss: -480408.0986328125
Episode 9625: Time: 0.4465312957763672, Total Reward: 268.39351606208504, Q Loss: 15499778.3125, Actor Loss: -259844.16796875
Episode 9626: Time: 0.2834506034851074, Total Reward: 166.10513911788092, Q Loss: 9414027.1875, Actor Loss: -171658.9169921875
Episode 9627: Time: 0.9651708602905273, Total Reward: 593.5022429273445, Q Loss: 44232193.953125, Actor Loss: -585389.2690429688
Episode 9628: Time: 0.6538465023040771, Total Reward: 398.106140494692, Q Loss: 31383026.125, Actor Loss: -391446.61474609375
Episode 9629: Time: 0.28296637535095215, Total Reward: 165.84753898885268, Q Loss: 13829532.859375, Actor Loss: -165248.08544921875
Episode 9630: Time: 0.3133506774902344, Total Reward: 183.62905052722695, Q Loss: 15928507.71875, Actor Loss: -192600.498046875
Episode 9631: Time: 0.10468912124633789, Total Reward: 53.77821350310825, Q Loss: 4141743.171875, Actor Loss: -62576.06103515625
Episode 9632: Time: 0.6684479713439941, Total Reward: 406.2022121479427, Q Loss: 32436950.2109375, Actor Loss: -404259.03515625
Episode 9633: Time: 0.7434148788452148, Total Reward: 449.4465419876192, Q Loss: 30121639.84375, Actor Loss: -460523.01953125
Episode 9634: Time: 0.5052809715270996, Total Reward: 304.9301104076654, Q Loss: 26755681.09375, Actor Loss: -304736.0751953125
Episode 9635: Time: 0.44759082794189453, Total Reward: 267.86019362957927, Q Loss: 21982131.8125, Actor Loss: -268238.646484375
Episode 9636: Time: 0.41687536239624023, Total Reward: 249.37999818004445, Q Loss: 19057861.0625, Actor Loss: -247781.130859375
Episode 9637: Time: 0.5056407451629639, Total Reward: 305.0677817528701, Q Loss: 23014674.078125, Actor Loss: -304049.1123046875
Episode 9638: Time: 0.44637084007263184, Total Reward: 267.3461542049661, Q Loss: 21606166.734375, Actor Loss: -271303.47900390625
Episode 9639: Time: 0.34216809272766113, Total Reward: 202.45138552090367, Q Loss: 15757430.859375, Actor Loss: -208340.47900390625
Episode 9640: Time: 0.8033101558685303, Total Reward: 489.9861331761219, Q Loss: 34004973.203125, Actor Loss: -484492.8193359375
Episode 9641: Time: 0.9062821865081787, Total Reward: 555.3759493430313, Q Loss: 48476572.296875, Actor Loss: -549222.3500976562
Episode 9642: Time: 0.20869874954223633, Total Reward: 118.84345469589486, Q Loss: 9792030.84375, Actor Loss: -124132.47705078125
Episode 9643: Time: 0.6388909816741943, Total Reward: 390.33851643168657, Q Loss: 26604258.859375, Actor Loss: -380724.25
Episode 9644: Time: 0.49069952964782715, Total Reward: 295.14542401813935, Q Loss: 26539494.203125, Actor Loss: -304041.42138671875
Episode 9645: Time: 0.13425993919372559, Total Reward: 72.87703496428736, Q Loss: 3949042.671875, Actor Loss: -80901.6923828125
Episode 9646: Time: 0.32732558250427246, Total Reward: 193.08063960601208, Q Loss: 15492726.78125, Actor Loss: -204980.10546875
Episode 9647: Time: 0.5498270988464355, Total Reward: 333.58206183978643, Q Loss: 29200887.15625, Actor Loss: -335724.69287109375

Episode 9648: Time: 0.1935567855834961, Total Reward: 110.13819921989428, Q Loss: 8862511.8125, Actor Loss: -113899.763671875
Episode 9649: Time: 0.23845815658569336, Total Reward: 137.6347906380683, Q Loss: 11946174.625, Actor Loss: -143688.47509765625
Episode 9650: Time: 0.2232365608215332, Total Reward: 128.66642566152788, Q Loss: 8638489.5625, Actor Loss: -139659.2392578125
Episode 9651: Time: 0.9064702987670898, Total Reward: 553.2474034266461, Q Loss: 41178330.078125, Actor Loss: -545462.4809570312
Episode 9652: Time: 0.17886066436767578, Total Reward: 100.35945433090373, Q Loss: 9288433.96875, Actor Loss: -107884.49365234375
Episode 9653: Time: 0.5793194770812988, Total Reward: 350.2985780825669, Q Loss: 26981334.65625, Actor Loss: -353611.46875
Episode 9654: Time: 0.7132058143615723, Total Reward: 434.64069516661874, Q Loss: 37134203.671875, Actor Loss: -433181.9912109375
Episode 9655: Time: 0.5802052021026611, Total Reward: 351.3379850363621, Q Loss: 30054175.125, Actor Loss: -353967.77587890625
Episode 9656: Time: 0.6087524890899658, Total Reward: 369.9802773366302, Q Loss: 28460861.609375, Actor Loss: -374392.484375
Episode 9657: Time: 0.23843789100646973, Total Reward: 137.85175688199556, Q Loss: 12807345.0, Actor Loss: -147560.79296875
Episode 9658: Time: 0.4013233184814453, Total Reward: 240.83286543567343, Q Loss: 22401253.828125, Actor Loss: -250683.7783203125
Episode 9659: Time: 0.5797209739685059, Total Reward: 350.9219862295609, Q Loss: 26222738.234375, Actor Loss: -349168.60986328125
Episode 9660: Time: 0.19344615936279297, Total Reward: 109.6811943077018, Q Loss: 8702381.34375, Actor Loss: -117099.173828125
Episode 9661: Time: 0.5798108577728271, Total Reward: 352.352642469281, Q Loss: 27517061.4375, Actor Loss: -359397.568359375
Episode 9662: Time: 0.07482457160949707, Total Reward: 35.468104942633936, Q Loss: 4101120.59375, Actor Loss: -43881.4033203125
Episode 9663: Time: 0.4916989803314209, Total Reward: 294.90977164160154, Q Loss: 21364071.1015625, Actor Loss: -301773.763671875
Episode 9664: Time: 0.683509111404419, Total Reward: 417.0158034155964, Q Loss: 31997776.8125, Actor Loss: -417886.2802734375
Episode 9665: Time: 0.23851704597473145, Total Reward: 138.0168784242453, Q Loss: 12479897.328125, Actor Loss: -143126.27978515625
Episode 9666: Time: 0.6389894485473633, Total Reward: 388.796452505023, Q Loss: 27959701.8125, Actor Loss: -376947.10107421875
Episode 9667: Time: 0.9948456287384033, Total Reward: 611.9982217778869, Q Loss: 51372156.703125, Actor Loss: -611545.0415039062
Episode 9668: Time: 0.3868420124053955, Total Reward: 230.61657303826476, Q Loss: 18186319.5, Actor Loss: -236050.37109375
Episode 9669: Time: 0.23817658424377441, Total Reward: 137.4371232431832, Q Loss: 13564883.15625, Actor Loss: -147255.517578125
Episode 9670: Time: 0.6980376243591309, Total Reward: 426.62535150091384, Q Loss: 35595341.59375, Actor Loss: -428347.662109375
Episode 9671: Time: 0.5354814529418945, Total Reward: 321.5243489901406, Q Loss: 31815626.71875, Actor Loss: -330237.0595703125
Episode 9672: Time: 0.3275761604309082, Total Reward: 191.83814022250368, Q Loss: 15246073.15625, Actor Loss: -198234.06591796875
Episode 9673: Time: 0.8766264915466309, Total Reward: 538.4735157930229, Q Loss: 40888781.640625, Actor Loss: -532878.3413085938
Episode 9674: Time: 0.8457422256469727, Total Reward: 518.3469158275101, Q Loss: 42218774.0, Actor Loss: -513994.89013671875
Episode 9675: Time: 0.34206724166870117, Total Reward: 202.82691528652288, Q Loss: 18463436.90625, Actor Loss: -211371.76318359375

Episode 9676: Time: 0.19345664978027344, Total Reward: 109.80826528505023, Q Loss: 11912980.671875, Actor Loss: -116126.70654296875
Episode 9677: Time: 0.3569924831390381, Total Reward: 212.58695448199262, Q Loss: 20962229.890625, Actor Loss: -217484.408203125
Episode 9678: Time: 0.7277729511260986, Total Reward: 445.7119574495573, Q Loss: 35541931.6484375, Actor Loss: -449829.78369140625
Episode 9679: Time: 0.28302550315856934, Total Reward: 165.7233436680357, Q Loss: 10729750.734375, Actor Loss: -169066.6376953125
Episode 9680: Time: 1.3506944179534912, Total Reward: 835.4614319396924, Q Loss: 59133750.28125, Actor Loss: -817609.8466796875
Episode 9681: Time: 0.13413310050964355, Total Reward: 72.90466471860483, Q Loss: 7901707.5625, Actor Loss: -81548.4033203125
Episode 9682: Time: 0.594630241394043, Total Reward: 359.74292943749913, Q Loss: 30807521.90625, Actor Loss: -361765.49658203125
Episode 9683: Time: 0.1487419605255127, Total Reward: 81.99796763976188, Q Loss: 6974011.359375, Actor Loss: -92829.3115234375
Episode 9684: Time: 0.44592785835266113, Total Reward: 268.0318653040634, Q Loss: 20279254.09375, Actor Loss: -277484.46728515625
Episode 9685: Time: 0.5342423915863037, Total Reward: 324.97877020968815, Q Loss: 28384354.171875, Actor Loss: -327063.76806640625
Episode 9686: Time: 0.47594761848449707, Total Reward: 287.2250644575222, Q Loss: 25112033.765625, Actor Loss: -301974.84423828125
Episode 9687: Time: 0.430478572845459, Total Reward: 256.0700710208484, Q Loss: 17785577.9375, Actor Loss: -262728.37841796875
Episode 9688: Time: 0.5497472286224365, Total Reward: 334.6636751174045, Q Loss: 26187982.125, Actor Loss: -342736.81884765625
Episode 9689: Time: 0.6241888999938965, Total Reward: 380.7661385175884, Q Loss: 32486845.78125, Actor Loss: -386034.9345703125
Episode 9690: Time: 0.4751918315887451, Total Reward: 286.54065864120247, Q Loss: 22220335.78125, Actor Loss: -285861.72119140625
Episode 9691: Time: 0.4754304885864258, Total Reward: 287.14836126670156, Q Loss: 21842970.765625, Actor Loss: -295797.3134765625
Episode 9692: Time: 0.19428539276123047, Total Reward: 109.6846917688421, Q Loss: 9024374.203125, Actor Loss: -119526.2548828125
Episode 9693: Time: 0.743751049041748, Total Reward: 454.72399866311207, Q Loss: 31981431.6875, Actor Loss: -460917.46435546875
Episode 9694: Time: 0.5061426162719727, Total Reward: 305.26703064478346, Q Loss: 21693426.359375, Actor Loss: -303368.90380859375
Episode 9695: Time: 0.7579660415649414, Total Reward: 462.90983304547206, Q Loss: 41300823.140625, Actor Loss: -469138.8359375
Episode 9696: Time: 0.37256693840026855, Total Reward: 220.31491526459806, Q Loss: 21029213.9375, Actor Loss: -233728.26953125
Episode 9697: Time: 0.8182191848754883, Total Reward: 501.23458044863133, Q Loss: 45532289.9296875, Actor Loss: -514111.73681640625
Episode 9698: Time: 0.4461393356323242, Total Reward: 268.24145842817296, Q Loss: 20615566.375, Actor Loss: -276837.830078125
Episode 9699: Time: 0.2531914710998535, Total Reward: 146.30098488354088, Q Loss: 11669103.8671875, Actor Loss: -157496.6455078125
Validation Mean: 9349.398176098326, Validation Std: 0.3121482491842685
saving model
Episode 9700: Time: 0.21010708808898926, Total Reward: 119.80891457940889, Q Loss: 7576613.375, Actor Loss: -129452.1220703125
Episode 9701: Time: 0.4468247890472412, Total Reward: 269.10943113291813, Q Loss: 23115098.765625, Actor Loss: -267380.7939453125
Episode 9702: Time: 0.3731536865234375, Total Reward: 219.8953945778851, Q Loss: 21117721.578125, Actor Loss: -237965.0751953125

Episode 9703: Time: 0.35742855072021484, Total Reward: 212.66362473343756, Q Loss: 18643258.359375, Actor Loss: -220279.35986328125
Episode 9704: Time: 0.4162771701812744, Total Reward: 249.33364806324016, Q Loss: 22240911.15625, Actor Loss: -255594.666015625
Episode 9705: Time: 0.7430047988891602, Total Reward: 453.8609028195738, Q Loss: 38762109.90625, Actor Loss: -460761.80126953125
Episode 9706: Time: 0.23812031745910645, Total Reward: 137.56463171645814, Q Loss: 17914747.53125, Actor Loss: -147375.54052734375
Episode 9707: Time: 0.20827484130859375, Total Reward: 118.86052767494887, Q Loss: 9010343.34375, Actor Loss: -127211.8388671875
Episode 9708: Time: 0.5046284198760986, Total Reward: 304.6726893813637, Q Loss: 27593939.28125, Actor Loss: -317160.859375
Episode 9709: Time: 0.40151095390319824, Total Reward: 238.87449386060788, Q Loss: 18099753.546875, Actor Loss: -251238.3603515625
Episode 9710: Time: 0.223524808883667, Total Reward: 128.54848877885823, Q Loss: 8399140.75, Actor Loss: -133097.77294921875
Episode 9711: Time: 0.14876890182495117, Total Reward: 81.34992436283126, Q Loss: 7793272.171875, Actor Loss: -91239.908203125
Episode 9712: Time: 0.43059659004211426, Total Reward: 258.6024836600195, Q Loss: 20945675.21875, Actor Loss: -265555.58251953125
Episode 9713: Time: 0.6829962730407715, Total Reward: 416.66444659125096, Q Loss: 35106936.46875, Actor Loss: -420381.33251953125
Episode 9714: Time: 0.6244196891784668, Total Reward: 380.8025166705253, Q Loss: 28624645.78125, Actor Loss: -393496.2978515625
Episode 9715: Time: 0.5493271350860596, Total Reward: 330.23840239192066, Q Loss: 24990532.109375, Actor Loss: -341478.9619140625
Episode 9716: Time: 0.17880606651306152, Total Reward: 100.65277962015834, Q Loss: 11163919.90625, Actor Loss: -111201.20751953125
Episode 9717: Time: 1.8260722160339355, Total Reward: 1131.7526103516664, Q Loss: 94336546.109375, Actor Loss: -1140001.8374023438
Episode 9718: Time: 0.5197229385375977, Total Reward: 312.5458969571113, Q Loss: 23589527.5, Actor Loss: -323002.86669921875
Episode 9719: Time: 0.08949732780456543, Total Reward: 44.701512428156654, Q Loss: 2386678.453125, Actor Loss: -53678.24072265625
Episode 9720: Time: 0.3416903018951416, Total Reward: 203.07307758865005, Q Loss: 21868614.34375, Actor Loss: -213782.9423828125
Episode 9721: Time: 0.11903762817382812, Total Reward: 63.02249977533918, Q Loss: 4834126.28125, Actor Loss: -72335.61474609375
Episode 9722: Time: 0.5363531112670898, Total Reward: 323.7227582610911, Q Loss: 27021373.265625, Actor Loss: -328163.1748046875
Episode 9723: Time: 0.5350956916809082, Total Reward: 323.6348641650609, Q Loss: 29975521.015625, Actor Loss: -335345.66552734375
Episode 9724: Time: 0.5048933029174805, Total Reward: 305.72114473399205, Q Loss: 22881651.515625, Actor Loss: -323215.0927734375
Episode 9725: Time: 0.4309680461883545, Total Reward: 258.2790071276199, Q Loss: 22652624.40625, Actor Loss: -270519.1474609375
Episode 9726: Time: 0.31208181381225586, Total Reward: 183.84096317473697, Q Loss: 12721994.515625, Actor Loss: -199047.791015625
Episode 9727: Time: 0.14897394180297852, Total Reward: 82.41527300404569, Q Loss: 9221314.53125, Actor Loss: -91036.66162109375
Episode 9728: Time: 0.3124518394470215, Total Reward: 184.7115509323525, Q Loss: 15083128.25, Actor Loss: -202212.9833984375
Episode 9729: Time: 0.9947636127471924, Total Reward: 612.0785288511329, Q Loss: 52568082.21875, Actor Loss: -618591.7563476562
Episode 9730: Time: 0.2231121063232422, Total Reward: 128.15184617489774, Q Loss: 10267435.71875, Actor Loss: -140848.4951171875

Episode 9731: Time: 0.28209805488586426, Total Reward: 165.58682200703063, Q Loss: 13913068.1171875, Actor Loss: -177143.900390625
Episode 9732: Time: 0.9931714534759521, Total Reward: 609.740907589659, Q Loss: 52315358.21875, Actor Loss: -625401.44921875
Episode 9733: Time: 0.4756326675415039, Total Reward: 285.26413301706134, Q Loss: 27408286.859375, Actor Loss: -300708.92529296875
Episode 9734: Time: 0.17827844619750977, Total Reward: 99.56814820606294, Q Loss: 10280663.53125, Actor Loss: -104933.166015625
Episode 9735: Time: 0.5196259021759033, Total Reward: 314.83026298052835, Q Loss: 24314293.1875, Actor Loss: -327561.52197265625
Episode 9736: Time: 1.1117653846740723, Total Reward: 686.6438550300211, Q Loss: 55299855.5625, Actor Loss: -696111.4755859375
Episode 9737: Time: 0.29740190505981445, Total Reward: 173.88758985563857, Q Loss: 15616869.9375, Actor Loss: -187075.392578125
Episode 9738: Time: 0.3707692623138428, Total Reward: 221.92324621195573, Q Loss: 17118386.890625, Actor Loss: -234443.958984375
Episode 9739: Time: 0.34184932708740234, Total Reward: 203.30055045890433, Q Loss: 15729156.953125, Actor Loss: -220444.61279296875
Episode 9740: Time: 0.8301112651824951, Total Reward: 510.6472416279308, Q Loss: 43211355.46875, Actor Loss: -528957.9497070312
Episode 9741: Time: 0.2973296642303467, Total Reward: 175.14138012349383, Q Loss: 14303569.84375, Actor Loss: -189520.55810546875
Episode 9742: Time: 0.4747145175933838, Total Reward: 285.1569026661468, Q Loss: 27667079.171875, Actor Loss: -293678.26953125
Episode 9743: Time: 0.3560361862182617, Total Reward: 211.40445866828773, Q Loss: 15526404.421875, Actor Loss: -224125.3525390625
Episode 9744: Time: 0.34157609939575195, Total Reward: 203.57155175361854, Q Loss: 15706770.46875, Actor Loss: -211510.41943359375
Episode 9745: Time: 0.4304506778717041, Total Reward: 258.50824412676667, Q Loss: 18203832.84375, Actor Loss: -269678.30224609375
Episode 9746: Time: 0.23768377304077148, Total Reward: 137.1156084251327, Q Loss: 11267313.359375, Actor Loss: -152168.53759765625
Episode 9747: Time: 0.10445761680603027, Total Reward: 54.049158059193395, Q Loss: 4865931.15625, Actor Loss: -68714.421875
Episode 9748: Time: 0.23815035820007324, Total Reward: 136.63590291970573, Q Loss: 9488710.578125, Actor Loss: -149269.9814453125
Episode 9749: Time: 0.41623401641845703, Total Reward: 249.12279453932246, Q Loss: 21597644.578125, Actor Loss: -258999.42529296875
Episode 9750: Time: 0.40192556381225586, Total Reward: 240.41985085200332, Q Loss: 23561317.328125, Actor Loss: -247259.6162109375
Episode 9751: Time: 0.43299365043640137, Total Reward: 258.6948843784743, Q Loss: 23495102.796875, Actor Loss: -272283.51953125
Episode 9752: Time: 0.862445592880249, Total Reward: 527.7317602481726, Q Loss: 48897679.234375, Actor Loss: -555815.4038085938
Episode 9753: Time: 1.1576013565063477, Total Reward: 715.829613834056, Q Loss: 64313497.84375, Actor Loss: -737651.3256835938
Episode 9754: Time: 0.2975943088531494, Total Reward: 175.61212834509288, Q Loss: 16668456.140625, Actor Loss: -187535.294921875
Episode 9755: Time: 0.69809889793396, Total Reward: 425.9834455282193, Q Loss: 32081609.140625, Actor Loss: -447125.9560546875
Episode 9756: Time: 1.3194530010223389, Total Reward: 816.1980139570588, Q Loss: 72979807.59375, Actor Loss: -831832.1923828125
Episode 9757: Time: 0.38727879524230957, Total Reward: 229.39467163061389, Q Loss: 18277460.3125, Actor Loss: -245563.2666015625
Episode 9758: Time: 0.43111562728881836, Total Reward: 258.00418297110957, Q Loss: 19447137.078125, Actor Loss: -274846.8642578125

Episode 9759: Time: 0.4016072750091553, Total Reward: 239.3648112378615, Q Loss: 21583109.90625, Actor Loss: -253053.60888671875
Episode 9760: Time: 1.1120493412017822, Total Reward: 687.0630407143148, Q Loss: 58358555.65625, Actor Loss: -718143.3725585938
Episode 9761: Time: 0.35634946823120117, Total Reward: 211.80888001385264, Q Loss: 16906788.375, Actor Loss: -223729.310546875
Episode 9762: Time: 1.0087168216705322, Total Reward: 623.1146249784624, Q Loss: 49570589.734375, Actor Loss: -658499.0444335938
Episode 9763: Time: 0.13454747200012207, Total Reward: 71.94194848088975, Q Loss: 8555535.46875, Actor Loss: -83551.2392578125
Episode 9764: Time: 0.46187615394592285, Total Reward: 278.07124455435434, Q Loss: 24683844.90625, Actor Loss: -298616.28125
Episode 9765: Time: 1.0393147468566895, Total Reward: 639.9409801927679, Q Loss: 57716582.65625, Actor Loss: -663435.2939453125
Episode 9766: Time: 0.3270833492279053, Total Reward: 192.4676983543644, Q Loss: 14932638.59375, Actor Loss: -201454.4248046875
Episode 9767: Time: 0.4603142738342285, Total Reward: 277.01793835659083, Q Loss: 23908326.265625, Actor Loss: -295494.8564453125
Episode 9768: Time: 0.6823337078094482, Total Reward: 416.455101318249, Q Loss: 34410673.375, Actor Loss: -429864.95361328125
Episode 9769: Time: 1.423534631729126, Total Reward: 880.9179639437677, Q Loss: 84307992.734375, Actor Loss: -916902.4677734375
Episode 9770: Time: 0.7114441394805908, Total Reward: 434.58307292880323, Q Loss: 39923685.65625, Actor Loss: -455127.6708984375
Episode 9771: Time: 0.11901140213012695, Total Reward: 62.90268164751296, Q Loss: 5771063.0078125, Actor Loss: -76465.35302734375
Episode 9772: Time: 1.0547058582305908, Total Reward: 648.897304418767, Q Loss: 56074870.40625, Actor Loss: -671686.2978515625
Episode 9773: Time: 0.5497491359710693, Total Reward: 333.60546415131654, Q Loss: 27196064.6875, Actor Loss: -350382.2998046875
Episode 9774: Time: 0.29746317863464355, Total Reward: 174.9899147006083, Q Loss: 19235444.4375, Actor Loss: -189467.50146484375
Episode 9775: Time: 0.5788509845733643, Total Reward: 351.55169821513687, Q Loss: 27056895.171875, Actor Loss: -370414.87158203125
Episode 9776: Time: 0.49072980880737305, Total Reward: 296.1766468935719, Q Loss: 21700749.890625, Actor Loss: -313185.8408203125
Episode 9777: Time: 0.8762514591217041, Total Reward: 536.9502526660168, Q Loss: 56775990.328125, Actor Loss: -567211.732421875
Episode 9778: Time: 1.0401201248168945, Total Reward: 639.959533853105, Q Loss: 59479842.703125, Actor Loss: -663948.021484375
Episode 9779: Time: 0.4463167190551758, Total Reward: 268.61484390906736, Q Loss: 27765448.03125, Actor Loss: -289141.68310546875
Episode 9780: Time: 0.11929702758789062, Total Reward: 63.12376205547711, Q Loss: 6710489.671875, Actor Loss: -78168.7509765625
Episode 9781: Time: 0.1343984603881836, Total Reward: 72.49020861427228, Q Loss: 5838680.578125, Actor Loss: -82764.1748046875
Episode 9782: Time: 0.5348320007324219, Total Reward: 324.53582164790396, Q Loss: 22810632.078125, Actor Loss: -346247.1201171875
Episode 9783: Time: 0.5799233913421631, Total Reward: 350.8188579533613, Q Loss: 32035178.1875, Actor Loss: -375723.55859375
Episode 9784: Time: 0.460648775100708, Total Reward: 278.09510749405655, Q Loss: 21942291.796875, Actor Loss: -299326.5029296875
Episode 9785: Time: 0.31212449073791504, Total Reward: 183.82095348982043, Q Loss: 15232056.703125, Actor Loss: -200545.603515625
Episode 9786: Time: 0.4900972843170166, Total Reward: 295.69438035134664, Q Loss: 20420533.171875, Actor Loss: -309882.6357421875

Episode 9787: Time: 0.20821785926818848, Total Reward: 119.38555228789421, Q Loss: 9448569.421875, Actor Loss: -129415.9814453125
Episode 9788: Time: 0.2678062915802002, Total Reward: 156.5919739140518, Q Loss: 17925994.25, Actor Loss: -173208.3564453125
Episode 9789: Time: 0.14870762825012207, Total Reward: 81.67344543061631, Q Loss: 10046824.65625, Actor Loss: -99482.0712890625
Episode 9790: Time: 0.5938794612884521, Total Reward: 360.66623247379283, Q Loss: 32799544.921875, Actor Loss: -380990.95263671875
Episode 9791: Time: 0.6089253425598145, Total Reward: 370.0839068144279, Q Loss: 31954984.28125, Actor Loss: -390484.4443359375
Episode 9792: Time: 0.4907341003417969, Total Reward: 296.2554307722026, Q Loss: 26606561.109375, Actor Loss: -317405.18798828125
Episode 9793: Time: 0.44610047340393066, Total Reward: 267.80835381721823, Q Loss: 21391727.203125, Actor Loss: -281006.8623046875
Episode 9794: Time: 0.13472819328308105, Total Reward: 72.4077804705544, Q Loss: 6997597.375, Actor Loss: -86070.5361328125
Episode 9795: Time: 0.34183454513549805, Total Reward: 203.1792392897267, Q Loss: 16296191.875, Actor Loss: -216727.1064453125
Episode 9796: Time: 0.4459404945373535, Total Reward: 267.7943338474156, Q Loss: 15891445.203125, Actor Loss: -286287.4443359375
Episode 9797: Time: 0.22350788116455078, Total Reward: 128.94904214689893, Q Loss: 11696915.125, Actor Loss: -138393.7744140625
Episode 9798: Time: 0.757277250289917, Total Reward: 463.3898826221006, Q Loss: 40944128.640625, Actor Loss: -486280.50732421875
Episode 9799: Time: 0.6239306926727295, Total Reward: 379.97517490328477, Q Loss: 32862539.46875, Actor Loss: -408902.09912109375
Validation Mean: 9350.082995176792, Validation Std: 0.3220972574296706
saving model
Episode 9800: Time: 0.6123466491699219, Total Reward: 371.19686808189357, Q Loss: 36555509.859375, Actor Loss: -389149.5625
Episode 9801: Time: 0.5657036304473877, Total Reward: 342.8846224686982, Q Loss: 29838060.484375, Actor Loss: -363531.12646484375
Episode 9802: Time: 0.32802510261535645, Total Reward: 193.82671424509897, Q Loss: 16718624.953125, Actor Loss: -206195.90625
Episode 9803: Time: 0.5948116779327393, Total Reward: 361.132316388634, Q Loss: 29746054.65625, Actor Loss: -388749.9287109375
Episode 9804: Time: 0.28299880027770996, Total Reward: 165.53962981207283, Q Loss: 16806736.25, Actor Loss: -183103.6357421875
Episode 9805: Time: 0.907318115234375, Total Reward: 557.3520039109342, Q Loss: 45527238.328125, Actor Loss: -585030.951171875
Episode 9806: Time: 0.43198680877685547, Total Reward: 259.43464523996334, Q Loss: 23958862.40625, Actor Loss: -281310.20654296875
Episode 9807: Time: 0.11927556991577148, Total Reward: 62.934317563847614, Q Loss: 5129900.90625, Actor Loss: -76966.0673828125
Episode 9808: Time: 0.506166934967041, Total Reward: 305.75023133614974, Q Loss: 29156886.46875, Actor Loss: -320236.234375
Episode 9809: Time: 0.17862439155578613, Total Reward: 100.94336115604129, Q Loss: 9677897.015625, Actor Loss: -114738.9453125
Episode 9810: Time: 0.7732353210449219, Total Reward: 472.47015006941325, Q Loss: 36465137.46875, Actor Loss: -501019.99072265625
Episode 9811: Time: 0.6541941165924072, Total Reward: 398.5593663566925, Q Loss: 30625505.71875, Actor Loss: -425054.72509765625
Episode 9812: Time: 0.34203171730041504, Total Reward: 199.45003134326927, Q Loss: 17596546.15625, Actor Loss: -217921.14208984375
Episode 9813: Time: 0.49094605445861816, Total Reward: 296.4061441596075, Q Loss: 25341286.796875, Actor Loss: -318860.830078125

Episode 9814: Time: 0.26839542388916016, Total Reward: 156.1817643083661, Q Loss: 14998090.484375, Actor Loss: -168485.7236328125
Episode 9815: Time: 0.23871231079101562, Total Reward: 136.11016658218108, Q Loss: 16187076.5, Actor Loss: -153522.5439453125
Episode 9816: Time: 0.4313476085662842, Total Reward: 259.6239365363313, Q Loss: 23798862.421875, Actor Loss: -279048.67626953125
Episode 9817: Time: 0.3573148250579834, Total Reward: 212.48813221010911, Q Loss: 16483388.09375, Actor Loss: -232951.6396484375
Episode 9818: Time: 0.4464244842529297, Total Reward: 268.49500721578636, Q Loss: 22100675.46875, Actor Loss: -292125.955078125
Episode 9819: Time: 0.35694146156311035, Total Reward: 212.01495126912056, Q Loss: 15879515.875, Actor Loss: -231162.62353515625
Episode 9820: Time: 0.25316810607910156, Total Reward: 146.76007029229606, Q Loss: 13794621.671875, Actor Loss: -167948.828125
Episode 9821: Time: 1.128967046737671, Total Reward: 693.2546613903692, Q Loss: 52785114.25, Actor Loss: -730031.458984375
Episode 9822: Time: 0.5054688453674316, Total Reward: 305.2547971230569, Q Loss: 27751733.96875, Actor Loss: -318362.529296875
Episode 9823: Time: 0.7730209827423096, Total Reward: 472.8145543125992, Q Loss: 40817975.84375, Actor Loss: -500834.9931640625
Episode 9824: Time: 0.17866039276123047, Total Reward: 100.41148512922088, Q Loss: 9724703.875, Actor Loss: -116227.7236328125
Episode 9825: Time: 0.3576052188873291, Total Reward: 211.55238534855974, Q Loss: 17786685.90625, Actor Loss: -231377.49951171875
Episode 9826: Time: 0.43137264251708984, Total Reward: 257.62235728108885, Q Loss: 22741181.375, Actor Loss: -282547.185546875
Episode 9827: Time: 0.5941929817199707, Total Reward: 360.014151152338, Q Loss: 30455791.609375, Actor Loss: -389148.56396484375
Episode 9828: Time: 0.3713996410369873, Total Reward: 221.03144378325996, Q Loss: 18965970.484375, Actor Loss: -235873.62158203125
Episode 9829: Time: 0.14885735511779785, Total Reward: 81.59012206314739, Q Loss: 6441822.609375, Actor Loss: -95866.919921875
Episode 9830: Time: 0.3867957592010498, Total Reward: 229.6896267279299, Q Loss: 20338305.375, Actor Loss: -256717.55419921875
Episode 9831: Time: 0.19327497482299805, Total Reward: 109.8160955479683, Q Loss: 8762628.0546875, Actor Loss: -123031.2841796875
Episode 9832: Time: 0.550161600112915, Total Reward: 332.06198800500147, Q Loss: 28348538.640625, Actor Loss: -358460.63525390625
Episode 9833: Time: 0.37230372428894043, Total Reward: 221.5303116753222, Q Loss: 16109473.078125, Actor Loss: -234301.27734375
Episode 9834: Time: 0.7876002788543701, Total Reward: 482.47138394458443, Q Loss: 41224500.546875, Actor Loss: -501494.14599609375
Episode 9835: Time: 0.4904162883758545, Total Reward: 296.308722561263, Q Loss: 30711256.203125, Actor Loss: -316873.7939453125
Episode 9836: Time: 0.41678524017333984, Total Reward: 250.43607648942358, Q Loss: 25150072.28125, Actor Loss: -273147.86669921875
Episode 9837: Time: 0.31267690658569336, Total Reward: 183.93929233416839, Q Loss: 16131948.75, Actor Loss: -196409.2822265625
Episode 9838: Time: 0.4911482334136963, Total Reward: 295.9199322966955, Q Loss: 21159448.65625, Actor Loss: -326439.03125
Episode 9839: Time: 0.3127274513244629, Total Reward: 184.5990288579204, Q Loss: 13946002.234375, Actor Loss: -205023.06396484375
Episode 9840: Time: 0.46109747886657715, Total Reward: 276.7501318513846, Q Loss: 27544457.421875, Actor Loss: -308361.81103515625
Episode 9841: Time: 0.5804624557495117, Total Reward: 351.5714584575365, Q Loss: 38245958.96875, Actor Loss: -372654.25439453125

Episode 9842: Time: 0.4170374870300293, Total Reward: 247.70158787918896, Q Loss: 20849990.515625, Actor Loss: -271002.3525390625
Episode 9843: Time: 0.4171438217163086, Total Reward: 249.59429184351978, Q Loss: 20029633.125, Actor Loss: -279131.53857421875
Episode 9844: Time: 0.19354486465454102, Total Reward: 108.50821568463589, Q Loss: 6607442.453125, Actor Loss: -123412.80419921875
Episode 9845: Time: 0.4917125701904297, Total Reward: 295.7782331509989, Q Loss: 25937105.875, Actor Loss: -316878.779296875
Episode 9846: Time: 0.44606685638427734, Total Reward: 266.7628047930502, Q Loss: 23233666.421875, Actor Loss: -291445.55029296875
Episode 9847: Time: 0.14881038665771484, Total Reward: 81.8188499534372, Q Loss: 8447607.59375, Actor Loss: -98351.97412109375
Episode 9848: Time: 0.5948953628540039, Total Reward: 359.78431659557714, Q Loss: 30444731.9375, Actor Loss: -383771.03125
Episode 9849: Time: 0.6377921104431152, Total Reward: 386.4034733968789, Q Loss: 25997389.90625, Actor Loss: -425844.37890625
Episode 9850: Time: 0.40146756172180176, Total Reward: 240.17025663255848, Q Loss: 24941728.21875, Actor Loss: -263150.4443359375
Episode 9851: Time: 0.23854732513427734, Total Reward: 137.57148534531564, Q Loss: 11592875.40625, Actor Loss: -152614.4990234375
Episode 9852: Time: 0.20847821235656738, Total Reward: 119.43380191211264, Q Loss: 11667780.265625, Actor Loss: -131503.65283203125
Episode 9853: Time: 0.14893841743469238, Total Reward: 81.39557298368676, Q Loss: 6432305.609375, Actor Loss: -97104.7626953125
Episode 9854: Time: 0.3276529312133789, Total Reward: 193.15857851987477, Q Loss: 20603265.640625, Actor Loss: -217034.3779296875
Episode 9855: Time: 0.22299695014953613, Total Reward: 127.69381410631557, Q Loss: 12886973.65625, Actor Loss: -148557.234375
Episode 9856: Time: 0.4166078567504883, Total Reward: 249.34236720386684, Q Loss: 20745744.40625, Actor Loss: -272039.20458984375
Episode 9857: Time: 0.5054163932800293, Total Reward: 305.4769429810498, Q Loss: 28438812.078125, Actor Loss: -335692.66015625
Episode 9858: Time: 0.14911556243896484, Total Reward: 81.22801270204029, Q Loss: 7095499.625, Actor Loss: -97847.599609375
Episode 9859: Time: 0.43134284019470215, Total Reward: 257.96729638144546, Q Loss: 24445991.359375, Actor Loss: -285480.0107421875
Episode 9860: Time: 0.5052657127380371, Total Reward: 303.0530213474205, Q Loss: 28074757.515625, Actor Loss: -330230.8505859375
Episode 9861: Time: 0.43143415451049805, Total Reward: 258.742970654182, Q Loss: 20138434.796875, Actor Loss: -283872.9482421875
Episode 9862: Time: 0.41671299934387207, Total Reward: 249.14462207612937, Q Loss: 24902069.171875, Actor Loss: -276669.8486328125
Episode 9863: Time: 0.8759262561798096, Total Reward: 538.2917619117496, Q Loss: 46788436.140625, Actor Loss: -579561.9672851562
Episode 9864: Time: 0.2976810932159424, Total Reward: 174.90578065403037, Q Loss: 13895770.78125, Actor Loss: -196959.708984375
Episode 9865: Time: 0.4756498336791992, Total Reward: 286.34163855564947, Q Loss: 30307236.75, Actor Loss: -318864.2578125
Episode 9866: Time: 0.44570446014404297, Total Reward: 267.86617073494045, Q Loss: 19035157.90625, Actor Loss: -291274.720703125
Episode 9867: Time: 0.32709455490112305, Total Reward: 194.13157164257743, Q Loss: 18909094.90625, Actor Loss: -213838.3837890625
Episode 9868: Time: 0.22306299209594727, Total Reward: 129.1013952841906, Q Loss: 12630148.5625, Actor Loss: -145513.689453125
Episode 9869: Time: 0.5058145523071289, Total Reward: 305.30164579672436, Q Loss: 26871737.171875, Actor Loss: -333442.7080078125

Episode 9870: Time: 0.31325507164001465, Total Reward: 183.6446316104873, Q Loss: 19075646.34375, Actor Loss: -202571.5703125
Episode 9871: Time: 0.2826828956604004, Total Reward: 165.67150798620673, Q Loss: 20458770.171875, Actor Loss: -187059.65966796875
Episode 9872: Time: 0.16392159461975098, Total Reward: 91.19315472510849, Q Loss: 9019747.71875, Actor Loss: -106964.7763671875
Episode 9873: Time: 0.4162917137145996, Total Reward: 249.94321212470953, Q Loss: 19642487.4375, Actor Loss: -278429.564453125
Episode 9874: Time: 0.4905400276184082, Total Reward: 296.3195825981505, Q Loss: 20341245.796875, Actor Loss: -319721.11767578125
Episode 9875: Time: 0.7274866104125977, Total Reward: 445.4480253537573, Q Loss: 37685512.5625, Actor Loss: -473094.34375
Episode 9876: Time: 0.11915135383605957, Total Reward: 62.9140954703785, Q Loss: 8470702.3125, Actor Loss: -78135.3251953125
Episode 9877: Time: 0.40172600746154785, Total Reward: 239.53223756324974, Q Loss: 22050466.609375, Actor Loss: -261329.7861328125
Episode 9878: Time: 0.5205581188201904, Total Reward: 314.6769468422397, Q Loss: 32514101.8125, Actor Loss: -344419.7470703125
Episode 9879: Time: 0.3878617286682129, Total Reward: 230.28142802157095, Q Loss: 20435030.125, Actor Loss: -247375.13623046875
Episode 9880: Time: 0.34223151206970215, Total Reward: 202.90903917650883, Q Loss: 21078792.984375, Actor Loss: -225893.4462890625
Episode 9881: Time: 0.3273193836212158, Total Reward: 192.95316639711217, Q Loss: 20685112.15625, Actor Loss: -216470.798828125
Episode 9882: Time: 0.14885377883911133, Total Reward: 81.93844723146702, Q Loss: 8279544.8125, Actor Loss: -101120.6005859375
Episode 9883: Time: 1.4697954654693604, Total Reward: 908.314905229783, Q Loss: 73678409.328125, Actor Loss: -974482.8598632812
Episode 9884: Time: 0.6984837055206299, Total Reward: 424.9839267516797, Q Loss: 36488835.9375, Actor Loss: -460703.4697265625
Episode 9885: Time: 0.4610557556152344, Total Reward: 278.07564096216566, Q Loss: 29004980.71875, Actor Loss: -306143.7626953125
Episode 9886: Time: 0.41612911224365234, Total Reward: 248.76822202917333, Q Loss: 26289031.5625, Actor Loss: -277743.5166015625
Episode 9887: Time: 0.401108980178833, Total Reward: 239.23353210404906, Q Loss: 24060258.515625, Actor Loss: -265799.62255859375
Episode 9888: Time: 0.41608333587646484, Total Reward: 248.26131226143767, Q Loss: 24334520.234375, Actor Loss: -277484.6015625
Episode 9889: Time: 0.17859816551208496, Total Reward: 99.86738461223638, Q Loss: 8439183.9375, Actor Loss: -117920.23828125
Episode 9890: Time: 0.25298523902893066, Total Reward: 147.05302716641697, Q Loss: 13843171.953125, Actor Loss: -171421.15625
Episode 9891: Time: 0.3567807674407959, Total Reward: 212.71176314779265, Q Loss: 18392964.9140625, Actor Loss: -230569.63623046875
Episode 9892: Time: 0.20844125747680664, Total Reward: 119.30957468856978, Q Loss: 10650405.03125, Actor Loss: -132670.3046875
Episode 9893: Time: 0.37135934829711914, Total Reward: 221.19616642251174, Q Loss: 22088986.46875, Actor Loss: -241320.708984375
Episode 9894: Time: 0.6091287136077881, Total Reward: 371.2723652591526, Q Loss: 35454203.03125, Actor Loss: -405678.771484375
Episode 9895: Time: 0.1935734748840332, Total Reward: 109.7832106039868, Q Loss: 9284887.59375, Actor Loss: -128009.072265625
Episode 9896: Time: 0.22301220893859863, Total Reward: 128.3794594864343, Q Loss: 10334033.921875, Actor Loss: -151276.201171875
Episode 9897: Time: 0.2972133159637451, Total Reward: 173.74141793437045, Q Loss: 17103822.40625, Actor Loss: -198782.98046875

Episode 9898: Time: 0.26784801483154297, Total Reward: 155.93894427344273, Q Loss: 14879518.53125, Actor Loss: -178807.23046875
Episode 9899: Time: 0.8016088008880615, Total Reward: 491.27442749573197, Q Loss: 42246649.34375, Actor Loss: -538360.7236328125
Validation Mean: 9348.824550216876, Validation Std: 0.5817311830902007
saving model
Episode 9900: Time: 0.4779629707336426, Total Reward: 285.1885042652966, Q Loss: 22723698.03125, Actor Loss: -311146.14892578125
Episode 9901: Time: 0.5504791736602783, Total Reward: 332.7848892888585, Q Loss: 31439897.5625, Actor Loss: -366468.92724609375
Episode 9902: Time: 0.6102025508880615, Total Reward: 369.4905538780815, Q Loss: 38155869.40625, Actor Loss: -405403.9658203125
Episode 9903: Time: 0.3415944576263428, Total Reward: 202.53518222030928, Q Loss: 19770205.71875, Actor Loss: -226256.7158203125
Episode 9904: Time: 0.3566162586212158, Total Reward: 212.42582643254718, Q Loss: 18906096.71875, Actor Loss: -237130.970703125
Episode 9905: Time: 0.6092190742492676, Total Reward: 370.4325783665966, Q Loss: 29550946.53125, Actor Loss: -398830.0322265625
Episode 9906: Time: 0.4160499572753906, Total Reward: 248.9792800963953, Q Loss: 22320134.90625, Actor Loss: -274031.7451171875
Episode 9907: Time: 0.9660460948944092, Total Reward: 593.9162116081702, Q Loss: 53199307.390625, Actor Loss: -649139.7392578125
Episode 9908: Time: 0.7733128070831299, Total Reward: 473.5817631902411, Q Loss: 41832352.46875, Actor Loss: -511967.3525390625
Episode 9909: Time: 0.3127403259277344, Total Reward: 183.69385669158885, Q Loss: 23003739.6875, Actor Loss: -202578.142578125
Episode 9910: Time: 0.7588667869567871, Total Reward: 464.77868012278003, Q Loss: 40014006.3125, Actor Loss: -507705.6259765625
Episode 9911: Time: 0.1637134552001953, Total Reward: 90.9909494026069, Q Loss: 10190183.46875, Actor Loss: -109659.9970703125
Episode 9912: Time: 0.9953725337982178, Total Reward: 610.072740679325, Q Loss: 53223809.890625, Actor Loss: -643488.6943359375
Episode 9913: Time: 0.31248044967651367, Total Reward: 183.6518907214139, Q Loss: 18643858.5, Actor Loss: -211539.0361328125
Episode 9914: Time: 0.520503044128418, Total Reward: 314.86541660479656, Q Loss: 27680092.65625, Actor Loss: -354413.70263671875
Episode 9915: Time: 0.2530372142791748, Total Reward: 146.58983745580377, Q Loss: 11587892.28125, Actor Loss: -172207.634765625
Episode 9916: Time: 0.43130040168762207, Total Reward: 249.00360861608212, Q Loss: 22024550.09375, Actor Loss: -285034.5869140625
Episode 9917: Time: 0.23226666450500488, Total Reward: 155.9747441782129, Q Loss: 15685242.0625, Actor Loss: -174944.91552734375
Episode 9918: Time: 0.34992456436157227, Total Reward: 257.59381091110436, Q Loss: 23893361.28125, Actor Loss: -283002.2021484375
Episode 9919: Time: 0.22777509689331055, Total Reward: 164.58901294153122, Q Loss: 19613281.09375, Actor Loss: -184973.50390625
Episode 9920: Time: 0.1437082290649414, Total Reward: 99.84731350501863, Q Loss: 13679497.4375, Actor Loss: -120440.5146484375
Episode 9921: Time: 0.25138354301452637, Total Reward: 182.49625547721212, Q Loss: 14316592.109375, Actor Loss: -211887.880859375
Episode 9922: Time: 0.3222529888153076, Total Reward: 239.73661499292913, Q Loss: 23180395.625, Actor Loss: -270657.068359375
Episode 9923: Time: 0.5849518775939941, Total Reward: 443.41963073907436, Q Loss: 37587675.328125, Actor Loss: -489050.4404296875
Episode 9924: Time: 0.5245089530944824, Total Reward: 398.2322962211573, Q Loss: 31490437.125, Actor Loss: -432143.50341796875

Episode 9925: Time: 0.11938858032226562, Total Reward: 82.10474503156638, Q Loss: 8422343.09375, Actor Loss: -97896.9111328125
Episode 9926: Time: 0.14362335205078125, Total Reward: 100.72855074535507, Q Loss: 14206576.546875, Actor Loss: -120039.7255859375
Episode 9927: Time: 0.27466821670532227, Total Reward: 201.55949038650473, Q Loss: 18361900.078125, Actor Loss: -231220.9541015625
Episode 9928: Time: 0.1906423568725586, Total Reward: 138.25142873536504, Q Loss: 11378132.203125, Actor Loss: -161103.578125
Episode 9929: Time: 0.1194925308227539, Total Reward: 81.92693897324973, Q Loss: 9081359.6875, Actor Loss: -101081.11572265625
Episode 9930: Time: 0.3220486640930176, Total Reward: 239.13210497874798, Q Loss: 17321973.609375, Actor Loss: -261612.85400390625
Episode 9931: Time: 0.3766193389892578, Total Reward: 265.60470876111714, Q Loss: 23460293.1875, Actor Loss: -304661.58984375
Episode 9932: Time: 0.2660694122314453, Total Reward: 194.05424859753876, Q Loss: 22649394.5, Actor Loss: -217989.2236328125
Episode 9933: Time: 0.5501337051391602, Total Reward: 416.7977804108589, Q Loss: 43630567.0625, Actor Loss: -453716.9228515625
Episode 9934: Time: 0.7150676250457764, Total Reward: 547.2580119000302, Q Loss: 48088275.140625, Actor Loss: -608612.759765625
Episode 9935: Time: 0.3817167282104492, Total Reward: 287.3333597289968, Q Loss: 27546069.09375, Actor Loss: -317538.2158203125
Episode 9936: Time: 0.19096040725708008, Total Reward: 137.93447618410983, Q Loss: 15619730.4375, Actor Loss: -162120.306640625
Episode 9937: Time: 0.2977445125579834, Total Reward: 220.4432244809949, Q Loss: 19846561.734375, Actor Loss: -245390.1533203125
Episode 9938: Time: 0.905663251876831, Total Reward: 696.736392754147, Q Loss: 55611876.015625, Actor Loss: -767346.482421875
Episode 9939: Time: 0.47669529914855957, Total Reward: 361.8402387018329, Q Loss: 32458937.421875, Actor Loss: -400949.4384765625
Episode 9940: Time: 0.10772585868835449, Total Reward: 72.51416810866175, Q Loss: 5603039.125, Actor Loss: -88524.38525390625
Episode 9941: Time: 0.16708087921142578, Total Reward: 118.95790709648074, Q Loss: 8268818.59375, Actor Loss: -142994.509765625
Episode 9942: Time: 0.15529704093933105, Total Reward: 109.76352911850144, Q Loss: 9456126.828125, Actor Loss: -131520.77734375
Episode 9943: Time: 0.428663969039917, Total Reward: 322.9154899723534, Q Loss: 33841164.171875, Actor Loss: -364133.8974609375
Episode 9944: Time: 0.15499138832092285, Total Reward: 110.11565776042765, Q Loss: 12636658.4375, Actor Loss: -127705.7236328125
Episode 9945: Time: 0.13146018981933594, Total Reward: 90.77577470994777, Q Loss: 11522901.921875, Actor Loss: -108347.53125
Episode 9946: Time: 0.5122509002685547, Total Reward: 388.75972211601015, Q Loss: 37117990.234375, Actor Loss: -429930.6923828125
Episode 9947: Time: 0.3339855670928955, Total Reward: 249.6536033223419, Q Loss: 25902106.59375, Actor Loss: -283196.646484375
Episode 9948: Time: 0.15498757362365723, Total Reward: 110.2544398803642, Q Loss: 15797514.046875, Actor Loss: -135851.1240234375
Episode 9949: Time: 0.7256169319152832, Total Reward: 556.8676025991066, Q Loss: 47121482.25, Actor Loss: -608913.8662109375
Episode 9950: Time: 0.11934161186218262, Total Reward: 81.78674562099175, Q Loss: 11032906.21875, Actor Loss: -100141.7470703125
Episode 9951: Time: 0.452054500579834, Total Reward: 340.7067164881445, Q Loss: 37985380.515625, Actor Loss: -373662.0654296875
Episode 9952: Time: 0.28653645515441895, Total Reward: 212.36924559298603, Q Loss: 21431472.65625, Actor Loss: -238604.13671875

Episode 9953: Time: 0.6072967052459717, Total Reward: 462.373714057009, Q Loss: 39644360.046875, Actor Loss: -508183.033203125
Episode 9954: Time: 0.10734438896179199, Total Reward: 72.10524941030232, Q Loss: 8713619.875, Actor Loss: -98161.7236328125
Episode 9955: Time: 0.25041937828063965, Total Reward: 184.1808621967524, Q Loss: 15899207.9375, Actor Loss: -207689.5478515625
Episode 9956: Time: 0.21426653861999512, Total Reward: 155.73585937746736, Q Loss: 15758907.421875, Actor Loss: -185794.400390625
Episode 9957: Time: 0.2462630271911621, Total Reward: 183.55769689282926, Q Loss: 21240031.28125, Actor Loss: -212621.0439453125
Episode 9958: Time: 0.19535398483276367, Total Reward: 145.67528083757475, Q Loss: 11336471.4375, Actor Loss: -168072.0908203125
Episode 9959: Time: 0.44043850898742676, Total Reward: 331.81695021916005, Q Loss: 38794625.0, Actor Loss: -375245.4404296875
Episode 9960: Time: 0.1787703037261963, Total Reward: 128.29972946195042, Q Loss: 19293097.9375, Actor Loss: -146365.53466796875
Episode 9961: Time: 0.857093095779419, Total Reward: 658.8977858470454, Q Loss: 62551215.515625, Actor Loss: -714607.1455078125
Episode 9962: Time: 1.154188632965088, Total Reward: 891.3750855529466, Q Loss: 80443745.46875, Actor Loss: -962534.3227539062
Episode 9963: Time: 0.251370906829834, Total Reward: 184.60410992628107, Q Loss: 18398331.96875, Actor Loss: -216930.630859375
Episode 9964: Time: 0.19074583053588867, Total Reward: 137.8436421922352, Q Loss: 14232060.875, Actor Loss: -162531.5908203125
Episode 9965: Time: 0.6071681976318359, Total Reward: 463.0444478602307, Q Loss: 49732674.09375, Actor Loss: -508843.1962890625
Episode 9966: Time: 0.4171478748321533, Total Reward: 314.7036923752674, Q Loss: 29108117.984375, Actor Loss: -357745.5322265625
Episode 9967: Time: 0.14321160316467285, Total Reward: 100.77378580535208, Q Loss: 12545181.265625, Actor Loss: -117576.2265625
Episode 9968: Time: 0.19096589088439941, Total Reward: 138.2962407592459, Q Loss: 14037801.1875, Actor Loss: -163849.3408203125
Episode 9969: Time: 0.23883318901062012, Total Reward: 171.89455335712123, Q Loss: 16157895.40625, Actor Loss: -202320.1787109375
Episode 9970: Time: 0.2741866111755371, Total Reward: 202.43341077808236, Q Loss: 24722144.25, Actor Loss: -234065.24609375
Episode 9971: Time: 0.7257099151611328, Total Reward: 554.5126343195639, Q Loss: 50440527.078125, Actor Loss: -630775.3095703125
Episode 9972: Time: 0.1311817169189453, Total Reward: 91.27129564595369, Q Loss: 6758844.734375, Actor Loss: -112972.83056640625
Episode 9973: Time: 0.1905062198638916, Total Reward: 138.0294992565525, Q Loss: 13285874.84375, Actor Loss: -157727.9755859375
Episode 9974: Time: 0.2740776538848877, Total Reward: 203.0392853455016, Q Loss: 14747243.3125, Actor Loss: -232355.4736328125
Episode 9975: Time: 0.26163744926452637, Total Reward: 190.87286834891924, Q Loss: 22502880.125, Actor Loss: -223153.6806640625
Episode 9976: Time: 0.7961282730102539, Total Reward: 612.7414646748796, Q Loss: 58624398.6875, Actor Loss: -677117.04296875
Episode 9977: Time: 0.6792006492614746, Total Reward: 518.6433487956562, Q Loss: 52598167.828125, Actor Loss: -569705.2529296875
Episode 9978: Time: 0.2619044780731201, Total Reward: 193.97009096168213, Q Loss: 19296479.84375, Actor Loss: -220975.740234375
Episode 9979: Time: 0.9649348258972168, Total Reward: 739.2673056592273, Q Loss: 71179201.9375, Actor Loss: -816451.6674804688
Episode 9980: Time: 0.26191043853759766, Total Reward: 193.10528274678077, Q Loss: 20637312.1875, Actor Loss: -224918.060546875

Episode 9981: Time: 0.25044751167297363, Total Reward: 184.14482353345153, Q Loss: 24449504.421875, Actor Loss: -212554.7451171875
Episode 9982: Time: 0.30980753898620605, Total Reward: 231.24442872959085, Q Loss: 22459779.71875, Actor Loss: -261182.638671875
Episode 9983: Time: 0.39306068420410156, Total Reward: 296.150475046328, Q Loss: 25920049.921875, Actor Loss: -337309.51171875
Episode 9984: Time: 0.6071336269378662, Total Reward: 464.09500682111656, Q Loss: 50194611.75, Actor Loss: -513531.08447265625
Episode 9985: Time: 0.4525876045227051, Total Reward: 342.0555709369179, Q Loss: 26687720.328125, Actor Loss: -392730.931640625
Episode 9986: Time: 0.4997122287750244, Total Reward: 379.6020577319497, Q Loss: 43675402.1875, Actor Loss: -425193.4287109375
Episode 9987: Time: 0.8825907707214355, Total Reward: 676.9777843258896, Q Loss: 65442148.40625, Actor Loss: -752112.3212890625
Episode 9988: Time: 0.6669986248016357, Total Reward: 507.2945016394882, Q Loss: 56166277.703125, Actor Loss: -567600.47265625
Episode 9989: Time: 0.6313974857330322, Total Reward: 481.80746934434205, Q Loss: 40522989.796875, Actor Loss: -540590.1328125
Episode 9990: Time: 0.19102978706359863, Total Reward: 136.76000933862977, Q Loss: 13096095.625, Actor Loss: -168109.14453125
Episode 9991: Time: 0.35730719566345215, Total Reward: 266.8145001516857, Q Loss: 30336182.265625, Actor Loss: -299334.626953125
Episode 9992: Time: 0.5597991943359375, Total Reward: 426.0119570161595, Q Loss: 36836954.390625, Actor Loss: -476021.5810546875
Episode 9993: Time: 0.6893272399902344, Total Reward: 528.847829151557, Q Loss: 47124069.34375, Actor Loss: -591789.8046875
Episode 9994: Time: 0.0716848373413086, Total Reward: 44.632813355526174, Q Loss: 5670447.125, Actor Loss: -58737.32421875
Episode 9995: Time: 0.17884373664855957, Total Reward: 128.91999482994999, Q Loss: 14700610.296875, Actor Loss: -149292.712890625
Episode 9996: Time: 0.11930990219116211, Total Reward: 81.24875719977199, Q Loss: 9999745.0, Actor Loss: -105973.091796875
Episode 9997: Time: 0.2742183208465576, Total Reward: 202.8199267148708, Q Loss: 18736727.03125, Actor Loss: -240548.2705078125
Episode 9998: Time: 0.5001764297485352, Total Reward: 379.1117026439382, Q Loss: 33630803.234375, Actor Loss: -420759.3505859375
Episode 9999: Time: 0.19087886810302734, Total Reward: 137.66608523251926, Q Loss: 16745258.0625, Actor Loss: -159332.42578125
Validation Mean: 9350.058095775108, Validation Std: 0.3687733185108295
saving model
Test Mean: 9356.465307822016, Test Std: 0.2116803937647784

Like what we did for the DQN, we can also animate one episode of the agent in the DoublePendulum environment.

In [17]:
```python
total_rewards, frames = t.play_episode(0,True,42,eval_env)
anim = animate(frames)
print(total_rewards)
HTML(anim.to_jshtml())
```

9356.728664643215
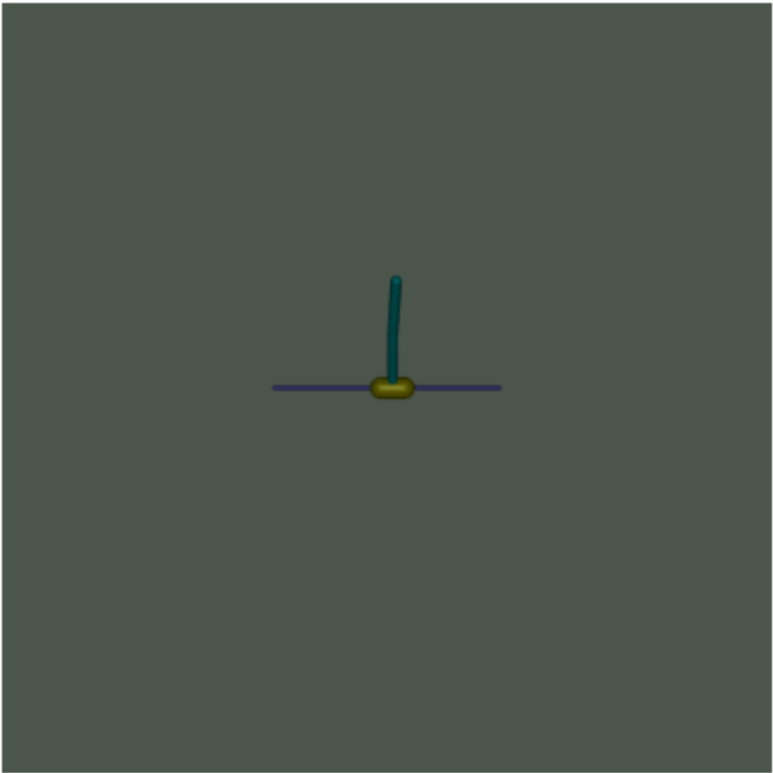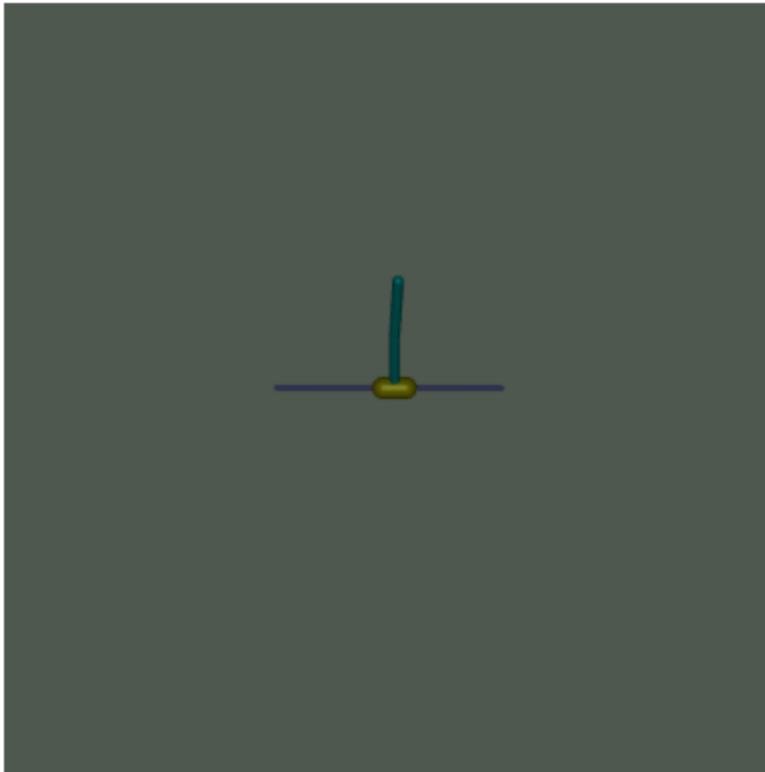
As we can see, the agent is able to balance the double pendulum and it eventually reaches the equilibrium. However this equilibrium is not a stable equilibrium, so lets see how this model performs with perturbations. To do this, we will perturbe the model every 49 steps with a large input of $\pm 0.75$ N to the cart. We will see how the model performs with this perturbation.

In [18]:
```python
import torch
frames = []
scores = 0
(s, _), done, ret = eval_env.reset(seed = 42
                                  ), False, 0
t.actor.eval()
S = []
outputs = []
# s, r, terminated, truncated, info = eval_env.step(3)
i = 0
with torch.no_grad():
    while not done:
        # if random.random() < 0.1:
        #     action = random.randint(0,4)
        # else:
        frames.append(eval_env.render())
        output = t.actor(torch.tensor(s).unsqueeze(0).to("cpu").float())
        i+=1
        if i%50 == 49:
            output += 0.75*(np.sign(torch.randn_like(output)))
        s_prime, r, terminated, truncated, info = eval_env.step(output.cpu()
        s = s_prime
        ret += r
```
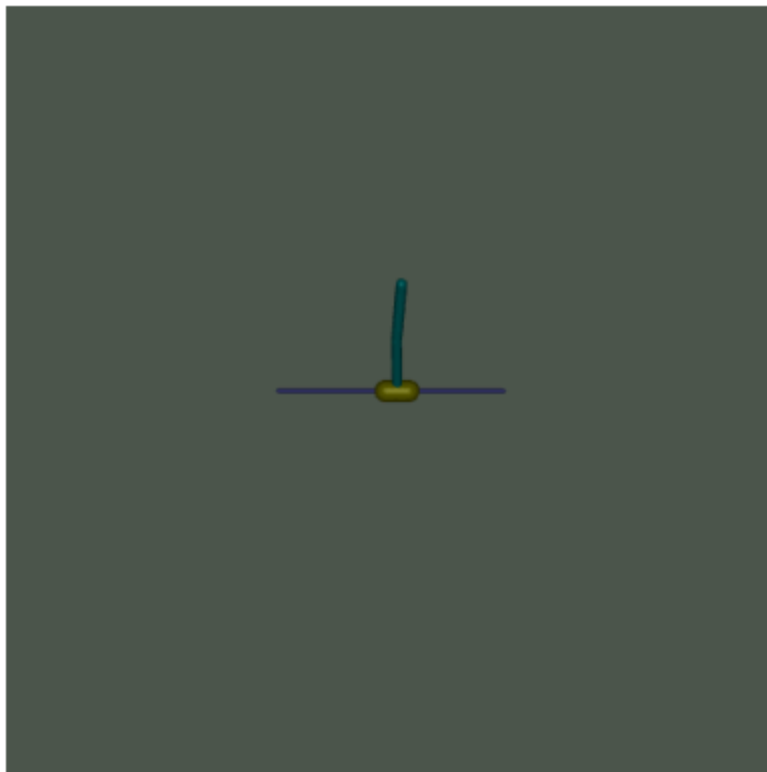
```
        done = terminated or truncated

    scores += ret
```
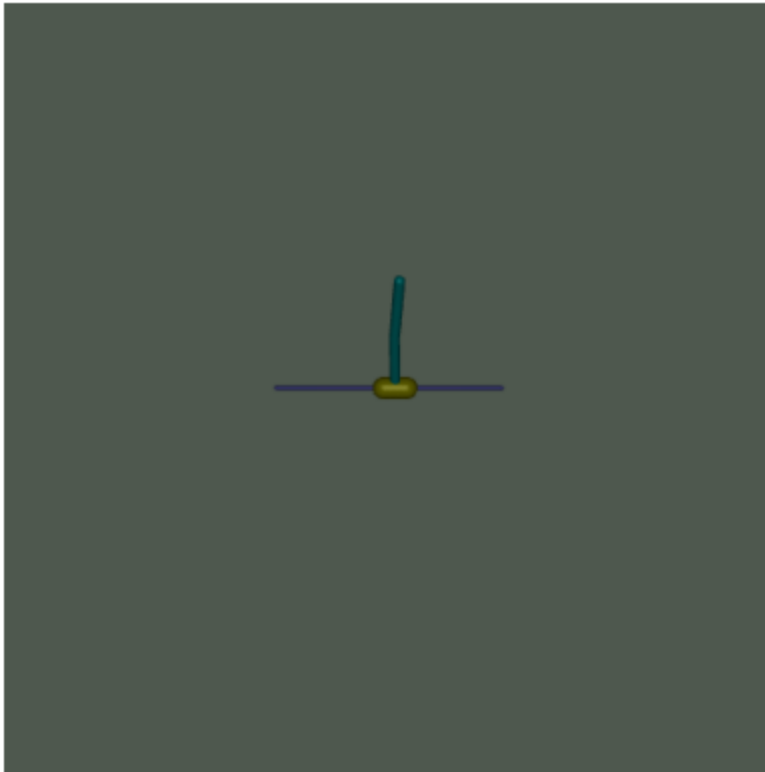
In [19]:
```python
anim = animate(frames)
print(total_rewards)
HTML(anim.to_jshtml())
```

9356.728664643215

Out[19]:



○ Once  ◉ Loop  ○ Reflect

You should see that the model is able to recover from the perturbation and is able to balance the double pendulum.

```python
import torch as torch
import torch.nn as nn
import numpy as np
import torch.nn.functional as F

def fanin_init(size, fanin=None):
    '''a helper function to initialize the weights of the model'''
    fanin = fanin or size[0]
    v = 1. / np.sqrt(fanin)
    return torch.Tensor(size).uniform_(-v, v)


class Actor(nn.Module):
    """Actor model for the DDPG algorithm.

    Layer 1: 400 units, ReLU activation, Fan-in weight initialization, ie each weight is
    initialized with a uniform distribution in the range of -1/sqrt(fan_in) to 1/sqrt(fan_in)
    Layer 2: 300 units, ReLU activation, Fan-in weight initialization, ie each weight is
    initialized with a uniform distribution in the range of -1/sqrt(fan_in) to 1/sqrt(fan_in)
    Layer 3: 1 unit, tanh activation, intialized with uniform weights in the range of -0.003 to
    0.003

    """
    def __init__(self, input_size:tuple[int], action_size:int,CNN = None):
        """
        input: tuple[int]
            The input size, as a tuple of dimensions, for the DoubleInvertedPendulum
        environment, of shape (11,)
        action_size: int
            The number of actions
        """
        super(Actor, self).__init__()
        # ========== YOUR CODE HERE ==========
        # TODO:
        # define the fully connected layers for the actor
        # ====================================
        self.CNN = CNN   # Currently unused

        in_dim = input_size[0]   # e.g., 11 for (11,)
        self.fc1 = nn.Linear(in_dim, 400)
        self.fc2 = nn.Linear(400, 300)
        self.fc3 = nn.Linear(300, action_size)

        self.init_weights()   # Initialize all layers

        # ========== YOUR CODE ENDS ==========

    def init_weights(self,init_w=3e-3):
        """
        Args:
            init_w (float, optional): the onesided range of the uniform distribution for the
        final layer. Defaults to 3e-3.
        """
        # ========== YOUR CODE HERE ==========
        # TODO:
        # initialize the weights of the model
        # ====================================
        # Fan-in initialization for fc1
        fan_in1 = self.fc1.weight.data.size()[1]   # input dim
        lim1 = 1. / np.sqrt(fan_in1)
        nn.init.uniform_(self.fc1.weight, -lim1, lim1)
        nn.init.uniform_(self.fc1.bias, -lim1, lim1)

        # Fan-in initialization for fc2
        fan_in2 = self.fc2.weight.data.size()[1]
        lim2 = 1. / np.sqrt(fan_in2)
        nn.init.uniform_(self.fc2.weight, -lim2, lim2)
```

```python
        nn.init.uniform_(self.fc2.bias, -lim2, lim2)

        # Small uniform initialization for output layer
        nn.init.uniform_(self.fc3.weight, -init_w, init_w)
        nn.init.uniform_(self.fc3.bias, -init_w, init_w)

        # ========== YOUR CODE ENDS ==========

    def forward(self, x:torch.Tensor)->torch.Tensor:
        # ========== YOUR CODE HERE ==========
        x = F.relu(self.fc1(x))
        x = F.relu(self.fc2(x))
        x = torch.tanh(self.fc3(x))   # Ensures output in [-1, 1]
        return x

        # ========== YOUR CODE ENDS ==========



class Critic(nn.Module):
    """Critic model for the DDPG algorithm.
    Layer 1: 400 units, ReLU activation, Fan-in weight initialization, ie each weight is
initialized with a uniform distribution in the range of -1/sqrt(fan_in) to 1/sqrt(fan_in)
    Layer 2: 300 units, ReLU activation, Fan-in weight initialization, ie each weight is
initialized with a uniform distribution in the range of -1/sqrt(fan_in) to 1/sqrt(fan_in).
Input is the concatenation of the 400 dimension embedding from the state, and the action taken.
    Layer 3: 1 unit, intialized with uniform weights in the range of -0.003 to 0.003
    """
    def __init__(self,input_size:tuple[int],action_size:int):
        """
        input: tuple[int]
            The input size, as a tuple of dimensions, for the DoubleInvertedPendulum
environment, of shape (11,)
        action_size: int
            The number of actions
        """
        super(Critic, self).__init__()
        # ========== YOUR CODE HERE ==========
        # TODO:
        # define the fully connected layers for the critic and initialize the weights
        # ====================================
        state_dim = input_size[0]

        self.fc1 = nn.Linear(state_dim, 400)
        self.fc2 = nn.Linear(400 + action_size, 300)
        self.fc3 = nn.Linear(300, 1)

        self.init_weights()

        # ========== YOUR CODE ENDS ==========

    def init_weights(self,init_w=3e-3):
        # ========== YOUR CODE HERE ==========
        # TODO:
        # initialize the weights of the model
        # ====================================
        fan_in1 = self.fc1.weight.data.size()[1]
        lim1 = 1. / np.sqrt(fan_in1)
        nn.init.uniform_(self.fc1.weight, -lim1, lim1)
        nn.init.uniform_(self.fc1.bias, -lim1, lim1)

        fan_in2 = self.fc2.weight.data.size()[1]
        lim2 = 1. / np.sqrt(fan_in2)
        nn.init.uniform_(self.fc2.weight, -lim2, lim2)
        nn.init.uniform_(self.fc2.bias, -lim2, lim2)

        nn.init.uniform_(self.fc3.weight, -init_w, init_w)
```

```python
            nn.init.uniform_(self.fc3.bias, -init_w, init_w)

        # ========== YOUR CODE ENDS ==========

    def forward(self, x:torch.Tensor, a:torch.Tensor)->torch.Tensor:
        # ========== YOUR CODE HERE ==========
        xs = F.relu(self.fc1(x))                   # process state
        xsa = torch.cat([xs, a], dim=1)            # concatenate state embedding with action
        x = F.relu(self.fc2(xsa))
        q_value = self.fc3(x)                      # no activation here; scalar output
        return q_value

        # ========== YOUR CODE ENDS ==========
```

```python
import torch
import torch.optim as optim
import torch.nn.functional as F
import torch.nn
import gymnasium as gym
from replay_buffer import ReplayBufferDDPG
import wandb
import random
import numpy as np
import os
import time
import model
from utils import *
import tqdm


class OU_Noise:
    def __init__(self,action_space:int,action_range:list[np.ndarray[float]],
                 mu:float = 0.0, theta:float = 0.15, sigma:float = 0.2,seed:int = 42):
        """Initialize the OU noise

        Args:
            action_space (int): The size of the action space action_range
            (list[np.ndarray[float]]): The range of the action space, the first
                element is the lower bound and the second element is the upper bound
            mu (float, optional): average of the noise. Defaults to 0.0.
            theta (float, optional): the speed of mean reversion. Defaults to 0.15.
            sigma (float, optional): the volatility of the noise. Defaults to 0.2.
            seed (int, optional): the seed for the random number generator. Defaults to 42.
        """
        self.action_space = action_space
        self.mu = mu
        self.theta = theta
        self.sigma = sigma
        self.state = np.ones(self.action_space) * self.mu
        self.action_range = action_range
        self.seed = seed
        np.random.seed(self.seed)

    def reset(self,sigma:float = 0.2):
        """Reset the noise

        Args:
            sigma (float, optional): you can change the sigma of the noise. Defaults to 0.2.
        """
        # ========== YOUR CODE HERE ==========
        # TODO:
        # hint look at line 36
        # ===================================
        self.sigma = sigma
        self.state = np.ones(self.action_space) * self.mu

        # ========== YOUR CODE ENDS ==========

    def _sample(self):
        """sample the noise per the discretized Ornstein-Uhlenbeck process detailed in the
notebook"""
        # ========== YOUR CODE HERE ==========
        dx = self.theta*(self.mu - self.state) + self.sigma*np.random.randn(self.action_space)
        self.state = self.state + dx
        return self.state

        # ========== YOUR CODE ENDS ==========

    def noise(self,action:np.ndarray[float]):
        """Add the noise to the action
```

```python
        Args:
            action (np.ndarray[float]): the action to add the noise to

        Returns:
            noised_action (np.ndarray[float]): the noised action, clipped to the action range
        """
        # ========== YOUR CODE HERE ==========
        # TODO:
        # you can use the _sample method to get the noise
        # ===================================
        noised_action = action + self._sample()

        clipped = np.clip(noised_action, self.action_range[0], self.action_range[1])
        # clipped =  np.min(np.max(noised_action, -1), 1)
        # print(action, noised_action, clipped)
        return clipped

        # ========== YOUR CODE ENDS ==========


class DDPG:
    def __init__(self, env:gym.Env,
                actor_model:model.Actor,
                critic_model:model.Critic,
                actor_kwargs = {},
                critic_kwargs = {},
                actor_lr:float = 0.0001,
                critic_lr:float = 0.001,
                gamma:float = 0.99,
                tau:float = 0.001,
                buffer_size:int = 10**6,
                batch_size:int = 64,
                loss_fn:str = 'mse_loss',
                use_wandb:bool = False,device:str = 'cpu',
                seed:int = 42,
                save_path:str = None):
        """Initialize the DDPG agent

        Args:
            env (_type_): The environment to train on
            actor_model (_type_): the class for the actor model
            critic_model (_type_): the class for the critic model
            actor_kwargs (dict, optional): Additional actor_kwargs . Defaults to {}.
            critic_kwargs (dict, optional): Additional critic_kwargs. Defaults to {}.
            actor_lr (float, optional): The learning rate for the optimizer. Defaults to
0.0001.
            critic_lr (float, optional): The learning rate for the critic optimizer. Defaults
to 0.001.
            gamma (float, optional): discount factor. Defaults to 0.99.
            tau (float, optional): soft update parameter for the target networks. Defaults to
0.001.
            buffer_size (int, optional): the size of the replay buffer. Defaults to 10^6
            batch_size (int, optional): the batch size for training. Defaults to 64.
            loss_fn (str, optional): name of the loss function to use. Defaults to 'mse_loss'.
            use_wandb (bool, optional): whether to use wandb. Defaults to False.
            device (str, optional): which device to use. Defaults to 'cpu'.
            seed (int, optional): seed for reproducibility. Defaults to 42.
            save_path (str, optional): path to save the model. Defaults to None.

        """
        self.env = env
        self._set_seed(seed)
        self.observation_space = self.env.observation_space.shape
        self.actor = actor_model(self.observation_space, self.env.action_space.shape[0]
                            , **actor_kwargs).to(device)
```

```python
        self.critic = critic_model(self.observation_space, self.env.action_space.shape[0]
                                    , **critic_kwargs).to(device)

        self.target_actor = actor_model(self.observation_space, self.env.action_space.shape[0]
                                        , **actor_kwargs).to(device)
        self.target_critic = critic_model(self.observation_space,
self.env.action_space.shape[0]
                                            , **critic_kwargs).to(device)

        self.OU_noise = OU_Noise(self.env.action_space.shape[0],
                                [self.env.action_space.low,self.env.action_space.high])

        #sync the target networks with the main networks
        self.target_actor.load_state_dict(self.actor.state_dict())
        self.target_critic.load_state_dict(self.critic.state_dict())

        self.actor_optimizer = optim.Adam(self.actor.parameters(), lr = actor_lr)
        self.critic_optimizer = optim.Adam(self.critic.parameters(), lr = critic_lr)
        self.gamma = gamma

        self.replay_buffer = ReplayBufferDDPG(buffer_size)
        self.batch_size = batch_size
        self.tau = tau
        self.device = device
        self.save_path = save_path if save_path is not None else "./"

        #set the loss function
        if loss_fn == 'smooth_l1_loss':
            self.loss_fn = F.smooth_l1_loss
        elif loss_fn == 'mse_loss':
            self.loss_fn = F.mse_loss
        else:
            raise ValueError('loss_fn must be either smooth_l1_loss or mse_loss')

        self.wandb = use_wandb
        if self.wandb:
            wandb.init(project = 'double_pendulum_ddpg')
            #log the hyperparameters
            wandb.config.update({
                'actor_lr': actor_lr,
                'critic_lr': critic_lr,
                'gamma': gamma,
                'buffer_size': buffer_size,
                'batch_size': batch_size,
                'loss_fn': loss_fn,
                'tau': tau,
                'device': device,
                'seed': seed,
                'save_path': save_path
            })

    def _set_seed(self, seed:int):
        random.seed(seed)
        np.random.seed(seed)
        self.seed = seed
        torch.manual_seed(seed)
        torch.cuda.manual_seed(seed)
        torch.backends.cudnn.deterministic = True
        gym.utils.seeding.np_random(seed)


    def play_episode(self,sigma:float = 0,return_frames:bool = False,seed:int = None,env =
None):
        """Play an episode of the environment

        Args:
            sigma (float, optional): the sigma for the OU noise. Defaults to 0.
```

```python
            return_frames (bool, optional): whether to return the frames. Defaults to False.
            seed (int, optional): the seed for the environment. Defaults to None.
        """
        if env is None:
            env = self.env
        if seed is not None:
            state,_ = env.reset(seed = seed)
        else:
            state,_ = env.reset()

        if sigma>0:
            self.OU_noise.reset(sigma)
        done = False
        total_reward = 0
        if return_frames:
            frames = []
        with torch.no_grad():
            while not done:
                action =
self.actor(torch.tensor(state).float().to(self.device).unsqueeze(0)).cpu().numpy()[0]
                if sigma>0:
                    action = self.OU_noise.noise(action)
                next_state, reward, terminated, truncated, _ = env.step(action)
                total_reward += reward
                done = terminated or truncated
                if return_frames:
                    frames.append(env.render())
                state = next_state
        if return_frames:
            return total_reward, frames
        else:
            return total_reward


    def _train_one_batch(self,batch_size):
        """train the agent on a single batch"""
        # ========== YOUR CODE HERE ==========
        # TODO:
        # sample the batch
        # compute the target Q value
        # compute the current Q value
        # compute the critic loss
        # optimize the critic
        # compute the actor loss
        # optimize the actor
        # update the model
        # return the losses
        # ===================================
        # raise NotImplementedError
        # sample the batch

        # compute the target Q value

        # compute the current Q value

        # compute the critic loss

        # optimize the critic
        # compute the actor loss
        # optimize the actor
        # update the model
        # return the losses

        if len(self.replay_buffer) < batch_size:
            return 0.0, 0.0  # skip training if not enough samples
```

```python
        # Sample a batch
        state_batch, action_batch, reward_batch, next_state_batch, done_batch =
self.replay_buffer.sample(batch_size)

        state_batch = torch.FloatTensor(state_batch).to(self.device)
        action_batch = torch.FloatTensor(action_batch).to(self.device)
        reward_batch = torch.FloatTensor(reward_batch).unsqueeze(1).to(self.device)
        next_state_batch = torch.FloatTensor(next_state_batch).to(self.device)
        # done_batch = torch.FloatTensor(done_batch).unsqueeze(1).to(self.device)
        # done_batch =
torch.FloatTensor(done_batch.astype(np.float32)).unsqueeze(1).to(self.device)
        done_batch = done_batch.to(torch.float32).unsqueeze(1).to(self.device)


        with torch.no_grad():
            next_actions = self.target_actor(next_state_batch)
            target_Q = self.target_critic(next_state_batch, next_actions)
            target_Q = reward_batch + self.gamma * target_Q * (1 - done_batch)

        current_Q = self.critic(state_batch, action_batch)
        critic_loss = self.loss_fn(current_Q, target_Q)

        self.critic_optimizer.zero_grad()
        critic_loss.backward()
        self.critic_optimizer.step()

        actor_loss = -self.critic(state_batch, self.actor(state_batch)).mean()

        self.actor_optimizer.zero_grad()
        actor_loss.backward()
        self.actor_optimizer.step()

        self._update_model()

        return critic_loss.item(), actor_loss.item()

        # ========== YOUR CODE ENDS ==========

    def _update_model(self):
        # ========== YOUR CODE HERE ==========
        for target_param, param in zip(self.target_actor.parameters(),
self.actor.parameters()):
            target_param.data.copy_(self.tau * param.data + (1.0 - self.tau) *
target_param.data)

        for target_param, param in zip(self.target_critic.parameters(),
self.critic.parameters()):
            target_param.data.copy_(self.tau * param.data + (1.0 - self.tau) *
target_param.data)
        # ========== YOUR CODE ENDS ==========

    def train(self, episodes:int, val_freq:int, val_episodes:int, test_episodes:int,
save_every:int,
              train_every:int = 1):
        """Train the agent

        Args:
            episodes (int): the number of episodes to train for
            val_freq (int): the frequency of validation
            val_episodes (int): the number of episodes to validate for
            test_episodes (int): the number of episodes to test for
            save_every (int): the frequency of saving the model
            train_every (int, optional): the frequency of training per enviroment interaction.
Defaults to 1.
        """
        os.makedirs(self.save_path, exist_ok=True)
```

```python
        best_val_mean = -np.inf
        for i in range(episodes):
            start_time = time.time()
            # print(sigma)
            state,_ = self.env.reset()
            self.OU_noise.reset()
            done = False
            total_reward = 0
            Q_loss_total = 0
            actor_loss_total = 0
            l = 0

            while not done:
                # ========== YOUR CODE HERE ==========
                # TODO:
                # get the action
                # add the noise, hint you can do this by calling the noise method of the OU
noise
                # get the transition
                # store the transition
                # update the state
                # if the replay buffer is large enough, and it is time to train the model
                # and update the total Q and actor loss
                # ====================================
                state_tensor = torch.tensor(state, dtype=torch.float32,
device=self.device).unsqueeze(0)
                action = self.actor(state_tensor).detach().cpu().numpy()[0]
                action = self.OU_noise.noise(action)

                next_state, reward, terminated, truncated, _ = self.env.step(action)
                done = terminated or truncated

                self.replay_buffer.add(state, action, reward, next_state, done)
                state = next_state
                total_reward += reward

                if len(self.replay_buffer) >= self.batch_size and l % train_every == 0:
                    Q_loss, actor_loss = self._train_one_batch(self.batch_size)
                    Q_loss_total += Q_loss
                    actor_loss_total += actor_loss

                l += 1

                # ========== YOUR CODE ENDS ==========

            if self.wandb:
                wandb.log({
                    'total_reward': total_reward,
                    'Q_loss': Q_loss_total,
                    'actor_loss': actor_loss_total
                })
            print(f"Episode {i}: Time: {time.time()-start_time}, Total Reward: {total_reward},
Q Loss: {Q_loss_total}, Actor Loss: {actor_loss_total}")


            if i % val_freq == val_freq-1:
                val_mean, val_std = self.validate(val_episodes)

                if self.wandb:
                    wandb.log({
                        'val_mean': val_mean,
                        'val_std': val_std
                    })
                print(f"Validation Mean: {val_mean}, Validation Std: {val_std}")
                if val_mean > best_val_mean:
                    best_val_mean = val_mean
                    self.save_model('best')
```

```python
        # print("save_every",save_every,i,save_every-1)
        if i % save_every == save_every-1:
            self.save_model(i)
            print("saving model")


    self.save_model('final')
    self.load_model('best')

    test_mean, test_std = self.validate(test_episodes)
    print(f"Test Mean: {test_mean}, Test Std: {test_std}")
    if self.wandb:
        wandb.log({
            'test_mean': test_mean,
            'test_std': test_std
        })




def validate(self, episodes:int):
    rewards = []
    for _ in range(episodes):
        rewards.append(self.play_episode())
    mean_reward = np.mean(rewards)
    std_reward = np.std(rewards)
    return mean_reward, std_reward

def save_model(self, name:str):
    actor_path = os.path.join(self.save_path, f"actor_{name}.pt")
    actor_model_path = os.path.join(self.save_path, f"actor_target_{name}.pt")
    torch.save(self.actor.state_dict(), actor_path)
    torch.save(self.target_actor.state_dict(), actor_model_path)

    critic_path = os.path.join(self.save_path, f"critic_{name}.pt")
    critic_model_path = os.path.join(self.save_path, f"critic_target_{name}.pt")
    torch.save(self.critic.state_dict(), critic_path)
    torch.save(self.target_critic.state_dict(), critic_model_path)

def load_model(self, name:str):
    actor_path = os.path.join(self.save_path, f"actor_{name}.pt")
    actor_model_path = os.path.join(self.save_path, f"actor_target_{name}.pt")
    self.actor.load_state_dict(torch.load(actor_path))
    self.target_actor.load_state_dict(torch.load(actor_model_path))

    critic_path = os.path.join(self.save_path, f"critic_{name}.pt")
    critic_model_path = os.path.join(self.save_path, f"critic_target_{name}.pt")
    self.critic.load_state_dict(torch.load(critic_path))
    self.target_critic.load_state_dict(torch.load(critic_model_path))
```