# Deep Q-Learning

Install dependencies for AI gym to run properly (shouldn't take more than a minute). If running on google cloud or running locally, only need to run once. Colab may require installing everytime the vm shuts down.

```
!pip3 install gym pyvirtualdisplay
!sudo apt-get install -y xvfb python-opengl ffmpeg

!pip3 install --upgrade setuptools --user
!pip3 install ez_setup
!pip3 install gym[atari]
!pip3 install gym[accept-rom-license]
```

For this assignment we will implement the Deep Q-Learning algorithm with Experience Replay as described in breakthrough paper "Playing Atari with Deep Reinforcement Learning". We will train an agent to play the famous game of Breakout.

```
from google.colab import drive
drive.mount("/content/gdrive", force_remount=True)
     Mounted at /content/gdrive
#os.chdir("/content/gdrive/MyDrive/CS444 Neha/assignment5 materials/")
os.chdir("/content/gdrive/MyDrive/UIUC/assignment5_materials/")
%matplotlib inline
import sys
import gym
import torch
import pylab
import random
import numpy as np
from collections import deque
from datetime import datetime
from copy import deepcopy
import torch.nn as nn
import torch.optim as optim
import torch.nn.functional as F
from torch.autograd import Variable
from utils import find_max_lives, check_live, get_frame, get_init_state
from model import DQN
from config import
import matplotlib.pyplot as plt
%load_ext autoreload
%autoreload 2
```

### Understanding the environment

In the following cell, we initialize our game of **Breakout** and you can see how the environment looks like. For further documentation of the of the environment refer to <a href="https://www.gymlibrary.dev/environments/atari/breakout/">https://www.gymlibrary.dev/environments/atari/breakout/</a>.

In breakout, we will use 3 actions "fire", "left", and "right". "fire" is only used to reset the game when a life is lost, "left" moves the agent left and "right" moves the agent right.

```
env = gym.make('BreakoutDeterministic-v4')
state = env.reset()

/usr/local/lib/python3.10/dist-packages/gym/core.py:317: DeprecationWarning: WARN: Initializing wrapper in old step API which deprecation(
/usr/local/lib/python3.10/dist-packages/gym/wrappers/step_api_compatibility.py:39: DeprecationWarning: WARN: Initializing env deprecation(
```

```
number_lives = find_max_lives(env)
state_size = env.observation_space.shape
action_size = 3 #fire, left, and right
```

/usr/local/lib/python3.10/dist-packages/gym/utils/passive\_env\_checker.py:227: DeprecationWarning: WARN: Core environment is v logger.deprecation(

# Creating a DQN Agent

Here we create a DQN Agent. This agent is defined in the **agent.py**. The corresponding neural network is defined in the **model.py**. Once you've created a working DQN agent, use the code in agent.py to create a double DQN agent in **agent\_double.py**. Set the flag "double\_dqn" to True to train the double DQN agent.

**Evaluation Reward**: The average reward received in the past 100 episodes/games.

Frame: Number of frames processed in total.

Memory Size: The current size of the replay memory.

```
double_dqn = False # set to True if using double DQN agent

if double_dqn:
    from agent_double import Agent
else:
    from agent import Agent

agent = Agent(action_size)
evaluation_reward = deque(maxlen=evaluation_reward_length)
frame = 0
memory_size = 0

%load_ext autoreload
%autoreload 2

The autoreload extension is already loaded. To reload it, use:
    %reload_ext autoreload
```

### ▼ Main Training Loop for DQN

In this training loop, we do not render the screen because it slows down training signficantly. To watch the agent play the game, run the code in next section "Visualize Agent Performance"

```
rewards, episodes = [], []
best_eval_reward = 0
for e in range(2500):
    done = False
    score = 0
    history = np.zeros([5, 84, 84], dtype=np.uint8)
    step = 0
    state = env.reset()
    next state = state
    life = number lives
    get_init_state(history, state, HISTORY_SIZE)
    while not done:
        step += 1
        frame += 1
        # Perform a fire action if ball is no longer on screen to continue onto next life
        if step > 1 and len(np.unique(next_state[:189] == state[:189])) < 2:</pre>
            action = agent.get_action(np.float32(history[:4, :, :]) / 255.)
        state = next_state
        next_state, reward, done, info = env.step(action + 1)
        frame_next_state = get_frame(next_state)
        history[4, :, :] = frame next state
        terminal_state = check_live(life, info['lives'])
```

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```
life = info['lives']
r = reward
# Store the transition in memory
agent.memory.push(deepcopy(frame_next_state), action, r, terminal_state)
# Start training after random sample generation
if(frame >= train_frame):
    agent.train policy net(frame)
    # Update the target network only for Double DQN only
    if double_dqn and (frame % update_target_network_frequency)== 0:
       agent.update_target_net()
score += reward
history[:4, :, :] = history[1:, :, :]
if done:
    evaluation reward.append(score)
    rewards.append(np.mean(evaluation_reward))
    episodes.append(e)
    pylab.plot(episodes, rewards, 'b')
    pylab.xlabel('Episodes')
    pylab.ylabel('Rewards')
    pylab.title('Episodes vs Reward')
    pylab.savefig("./save_graph/breakout_dqn_agent_v3.png") # save graph for training visualization
    # every episode, plot the play time
    print("episode:", e, " score:", score, " memory length:",
          len(agent.memory), " epsilon:", agent.epsilon, " steps:", step,
" lr:", agent.optimizer.param_groups[0]['lr'], " evaluation re
                                                                 evaluation reward:", np.mean(evaluation reward))
    # if the mean of scores of last 100 episode is bigger than 5 save model
    ### Change this save condition to whatever you prefer ###
    if np.mean(evaluation_reward) > 5 and np.mean(evaluation_reward) > best_eval_reward:
        torch.save(agent.policy_net, "./save_model/breakout_dqn_agent.pth")
        best_eval_reward = np.mean(evaluation_reward)
```

```
lr: 0.0001
episode: 0
             score: 3.0
                           memory length: 228
                                                 epsilon: 1.0
                                                                 steps: 228
                                                                                                evaluation reward: 3.0
             score: 0.0
                           memory length: 352
                                                 epsilon: 1.0
                                                                 steps: 124
                                                                                lr: 0.0001
                                                                                                evaluation reward: 1.5
episode: 1
                                                                 steps: 287
                                                                                                evaluation reward: 2.333333333333
episode: 2
             score: 4.0
                           memory length: 639
                                                 epsilon: 1.0
                                                                                lr: 0.0001
episode: 3
             score: 1.0
                           memory length: 791
                                                 epsilon: 1.0
                                                                 steps: 152
                                                                                1r: 0.0001
                                                                                                evaluation reward: 2.0
episode: 4
             score: 2.0
                           memory length: 993
                                                 epsilon: 1.0
                                                                 steps: 202
                                                                                lr: 0.0001
                                                                                                evaluation reward: 2.0
             score: 0.0
                                                  epsilon: 1.0
                                                                                                 evaluation reward: 1.66666666666
episode: 5
                           memory length: 1117
                                                                   steps: 124
                                                                                 lr: 0.0001
             score: 1.0
                           memory length: 1269
                                                  epsilon: 1.0
                                                                   steps: 152
                                                                                 lr: 0.0001
                                                                                                 evaluation reward: 1.57142857142
episode: 6
episode: 7
             score: 2.0
                           memory length: 1467
                                                  epsilon: 1.0
                                                                   steps: 198
                                                                                 lr: 0.0001
                                                                                                 evaluation reward: 1.625
                           memory length: 1686
                                                  epsilon: 1.0
                                                                   steps: 219
                                                                                                 evaluation reward: 1.66666666666
episode: 8
             score: 2.0
                                                                                 lr: 0.0001
episode: 9
             score: 2.0
                           memory length: 1884
                                                  epsilon: 1.0
                                                                   steps: 198
                                                                                 lr: 0.0001
                                                                                                 evaluation reward: 1.7
                            memory length: 2008
                                                   epsilon: 1.0
                                                                    steps: 124
                                                                                  1r: 0.0001
episode: 10
              score: 0.0
                                                                                                  evaluation reward: 1.545454545454
episode: 11
                            memory length: 2226
              score: 2.0
                                                   epsilon: 1.0
                                                                    steps: 218
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.5833333333
episode: 12
              score: 0.0
                            memory length: 2349
                                                   epsilon: 1.0
                                                                    steps: 123
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.4615384615
                            memory length: 2550
episode: 13
              score: 2.0
                                                   epsilon: 1.0
                                                                    steps: 201
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.5
episode: 14
              score: 0.0
                            memory length: 2674
                                                   epsilon: 1.0
                                                                    steps: 124
                                                                                  1r: 0.0001
                                                                                                  evaluation reward: 1.4
episode: 15
              score: 2.0
                            memory length: 2893
                                                   epsilon: 1.0
                                                                    steps: 219
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.4375
episode: 16
              score: 2.0
                            memory length: 3111
                                                   epsilon: 1.0
                                                                    steps: 218
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.4705882352
                                                   epsilon: 1.0
                                                                    steps: 247
                            memory length: 3358
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.55555555555
episode: 17
              score: 3.0
                                                   epsilon: 1.0
episode: 18
              score: 1.0
                            memory length: 3527
                                                                    steps: 169
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.5263157894
episode: 19
              score: 0.0
                            memory length: 3650
                                                   epsilon: 1.0
                                                                    steps: 123
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.45
episode: 20
              score: 2.0
                            memory length: 3868
                                                   epsilon: 1.0
                                                                    steps: 218
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.4761904761
episode: 21
              score: 1.0
                            memory length: 4041
                                                   epsilon: 1.0
                                                                    steps: 173
                                                                                  1r: 0.0001
                                                                                                  evaluation reward: 1.4545454545
                            memory length: 4214
                                                   epsilon: 1.0
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.4347826086
episode: 22
              score: 1.0
                                                                    steps: 173
episode: 23
              score: 1.0
                            memory length: 4366
                                                   epsilon: 1.0
                                                                    steps: 152
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.4166666666
episode: 24
              score: 0.0
                            memory length: 4489
                                                   epsilon: 1.0
                                                                    steps: 123
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.36
episode: 25
                            memory length: 4688
                                                   epsilon: 1.0
                                                                    steps: 199
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.3846153846
              score: 2.0
episode: 26
              score: 3.0
                            memory length: 4955
                                                   epsilon: 1.0
                                                                    steps: 267
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.44444444444
                            memory length: 5154
episode: 27
                                                   epsilon: 1.0
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.4642857142
              score: 2.0
                                                                    steps: 199
                            memory length: 5324
episode: 28
              score: 1.0
                                                   epsilon: 1.0
                                                                    steps: 170
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.4482758620
episode: 29
              score: 0.0
                            memory length: 5448
                                                   epsilon: 1.0
                                                                    steps: 124
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.4
                            memory length: 5651
episode: 30
                                                   epsilon: 1.0
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.4193548383
              score: 2.0
                                                                    steps: 203
episode: 31
              score: 2.0
                            memory length: 5869
                                                   epsilon: 1.0
                                                                    steps: 218
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.4375
                            memory length: 5992
episode: 32
              score: 0.0
                                                   epsilon: 1.0
                                                                    steps: 123
                                                                                  lr: 0.0001
                                                                                                  episode: 33
              score: 3.0
                            memory length: 6257
                                                   epsilon: 1.0
                                                                    steps: 265
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.4411764705
                                                                    steps: 248
                            memory length: 6505
                                                   epsilon: 1.0
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.4857142857
episode: 34
              score: 3.0
episode: 35
              score: 2.0
                            memory length: 6687
                                                   epsilon: 1.0
                                                                    steps: 182
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.5
episode: 36
              score: 0.0
                            memory length: 6811
                                                   epsilon: 1.0
                                                                    steps: 124
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.4594594594
                            memory length: 7087
                                                   epsilon: 1.0
                                                                                                  evaluation reward: 1.5263157894
episode: 37
              score: 4.0
                                                                    steps: 276
                                                                                  lr: 0.0001
episode: 38
              score: 0.0
                            memory length: 7211
                                                   epsilon: 1.0
                                                                    steps: 124
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.4871794871
                            memory length: 7559
                                                   epsilon: 1.0
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.575
episode: 39
              score: 5.0
                                                                    steps: 348
              score: 2.0
                                                                                                  evaluation reward: 1.5853658536
episode: 40
                            memory length: 7739
                                                   epsilon: 1.0
                                                                    steps: 180
                                                                                  lr: 0.0001
                            memory length: 7909
                                                   epsilon: 1.0
episode: 41
              score: 1.0
                                                                    steps: 170
                                                                                  1r: 0.0001
                                                                                                  evaluation reward: 1.5714285714
episode: 42
              score: 1.0
                            memory length: 8079
                                                   epsilon: 1.0
                                                                    steps: 170
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.5581395348
episode: 43
              score: 1.0
                            memory length: 8251
                                                   epsilon: 1.0
                                                                    steps: 172
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.5454545454
episode: 44
                            memory length: 8404
                                                   epsilon: 1.0
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.5333333333
              score: 1.0
                                                                    steps: 153
episode: 45
              score: 1.0
                            memory length: 8574
                                                   epsilon: 1.0
                                                                    steps: 170
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.5217391304
episode: 46
              score: 3.0
                            memory length: 8800
                                                   epsilon: 1.0
                                                                    steps: 226
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.5531914893
episode: 47
              score: 0.0
                            memory length: 8924
                                                   epsilon: 1.0
                                                                    steps: 124
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.5208333333
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.5918367346
episode: 48
              score: 5.0
                            memory length: 9252
                                                   epsilon: 1.0
                                                                    steps: 328
                            memory length: 9471
episode: 49
                                                   epsilon: 1.0
                                                                    steps: 219
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.6
              score: 2.0
episode: 50
              score: 1.0
                            memory length: 9641
                                                   epsilon: 1.0
                                                                    steps: 170
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.5882352941
                                                                                                  evaluation reward: 1.5769230769
episode: 51
              score: 1.0
                            memory length: 9793
                                                   epsilon: 1.0
                                                                    steps: 152
                                                                                  lr: 0.0001
episode: 52
              score: 1.0
                            memory length: 9963
                                                   epsilon: 1.0
                                                                    steps: 170
                                                                                  1r: 0.0001
                                                                                                  evaluation reward: 1.5660377358
                                                                                   lr: 0.0001
                                                                                                   evaluation reward: 1.537037037
episode: 53
              score: 0.0
                            memory length: 10087
                                                    epsilon: 1.0
                                                                     steps: 124
episode: 54
              score: 1.0
                            memory length: 10239
                                                    epsilon: 1.0
                                                                     steps: 152
                                                                                   lr: 0.0001
                                                                                                   evaluation reward: 1.527272727
                            memory length: 10557
                                                                                   lr: 0.0001
                                                    epsilon: 1.0
episode: 55
              score: 4.0
                                                                     steps: 318
                                                                                                   evaluation reward: 1.571428571
episode: 56
                            memory length: 10756
                                                    epsilon: 1.0
                                                                     steps: 199
                                                                                   lr: 0.0001
                                                                                                   evaluation reward: 1.578947368
              score: 2.0
episode: 57
              score: 0.0
                            memory length: 10879
                                                    epsilon: 1.0
                                                                     steps: 123
                                                                                   lr: 0.0001
                                                                                                   evaluation reward: 1.551724137
episode: 58
                            memory length: 11048
                                                    epsilon: 1.0
                                                                     steps: 169
                                                                                   1r: 0.0001
                                                                                                   evaluation reward: 1.542372881
              score: 1.0
episode: 59
              score: 0.0
                            memory length: 11172
                                                    epsilon: 1.0
                                                                     steps: 124
                                                                                   lr: 0.0001
                                                                                                   evaluation reward: 1.516666666
episode: 60
              score: 2.0
                            memory length: 11392
                                                    epsilon: 1.0
                                                                     steps: 220
                                                                                   lr: 0.0001
                                                                                                   evaluation reward: 1.524590163
episode: 61
              score: 0.0
                            memory length: 11516
                                                    epsilon: 1.0
                                                                     steps: 124
                                                                                   lr: 0.0001
                                                                                                   evaluation reward: 1.5
episode: 62
              score: 1.0
                            memory length: 11689
                                                    epsilon: 1.0
                                                                     steps: 173
                                                                                   lr: 0.0001
                                                                                                   evaluation reward: 1.492063492
                            memory length: 11887
                                                                     steps: 198
                                                    epsilon: 1.0
                                                                                   lr: 0.0001
                                                                                                   evaluation reward: 1.5
episode: 63
              score: 2.0
episode: 64
              score: 0.0
                            memory length: 12011
                                                    epsilon: 1.0
                                                                     steps: 124
                                                                                   lr: 0.0001
                                                                                                   evaluation reward: 1.476923076
                                                                                                   evaluation reward: 1.484848484
episode: 65
              score: 2.0
                            memory length: 12211
                                                    epsilon: 1.0
                                                                     steps: 200
                                                                                   1r: 0.0001
episode: 66
              score: 0.0
                            memory length: 12335
                                                    epsilon: 1.0
                                                                     steps: 124
                                                                                   lr: 0.0001
                                                                                                   evaluation reward: 1.462686567
episode: 67
              score: 0.0
                            memory length: 12459
                                                    epsilon: 1.0
                                                                     steps: 124
                                                                                   lr: 0.0001
                                                                                                   evaluation reward: 1.441176470
                            memory length: 12757
                                                    epsilon: 1.0
                                                                     steps: 298
                                                                                   lr: 0.0001
                                                                                                   evaluation reward: 1.478260869
episode: 68
              score: 4.0
episode: 69
              score: 2.0
                            memory length: 12977
                                                    epsilon: 1.0
                                                                     steps: 220
                                                                                   lr: 0.0001
                                                                                                   evaluation reward: 1.485714285
episode: 70
              score: 1.0
                            memory length: 13147
                                                    epsilon: 1.0
                                                                     steps: 170
                                                                                   lr: 0.0001
                                                                                                   evaluation reward: 1.478873239
episode: 71
              score: 2.0
                            memory length: 13346
                                                    epsilon: 1.0
                                                                     steps: 199
                                                                                   lr: 0.0001
                                                                                                   evaluation reward: 1.486111111
                                                                                   lr: 0.0001
episode: 72
              score: 2.0
                            memory length: 13545
                                                    epsilon: 1.0
                                                                     steps: 199
                                                                                                   evaluation reward: 1.493150684
                            memory length: 13744
episode: 73
              score: 2.0
                                                    epsilon: 1.0
                                                                     steps: 199
                                                                                   lr: 0.0001
                                                                                                   evaluation reward: 1.5
episode: 74
              score: 1.0
                            memory length: 13895
                                                    epsilon: 1.0
                                                                     steps: 151
                                                                                   lr: 0.0001
                                                                                                   evaluation reward: 1.493333333
                            memory length: 14187
episode: 75
                                                    epsilon: 1.0
                                                                     steps: 292
                                                                                   lr: 0.0001
                                                                                                   evaluation reward: 1.526315789
              score: 4.0
episode: 76
              score: 2.0
                            memory length: 14405
                                                    epsilon: 1.0
                                                                     steps: 218
                                                                                   lr: 0.0001
                                                                                                   evaluation reward: 1.532467532
episode: 77
              score: 5.0
                            memory length: 14731
                                                    epsilon: 1.0
                                                                     steps: 326
                                                                                   lr: 0.0001
                                                                                                   evaluation reward: 1.576923076
episode: 78
              score: 3.0
                            memory length: 14978
                                                    epsilon: 1.0
                                                                     steps: 247
                                                                                   lr: 0.0001
                                                                                                   evaluation reward: 1.594936708
episode: 79
              score: 2.0
                            memory length: 15177
                                                    epsilon: 1.0
                                                                     steps: 199
                                                                                   1r: 0.0001
                                                                                                   evaluation reward: 1.6
episode: 80
              score: 0.0
                            memory length: 15301
                                                    epsilon: 1.0
                                                                     steps: 124
                                                                                   lr: 0.0001
                                                                                                   evaluation reward: 1.580246913
                                                                                   lr: 0.0001
episode: 81
              score: 2.0
                            memory length: 15500
                                                    epsilon: 1.0
                                                                     steps: 199
                                                                                                   evaluation reward: 1.585365853
episode: 82
              score: 1.0
                            memory length: 15670
                                                    epsilon: 1.0
                                                                     steps: 170
                                                                                   lr: 0.0001
                                                                                                   evaluation reward: 1.578313253
episode: 83
              score: 4.0
                            memory length: 15969
                                                    epsilon: 1.0
                                                                     steps: 299
                                                                                   1r: 0.0001
                                                                                                   evaluation reward: 1,607142857
```

```
episode: 84
              score: 11.0
                             memory length: 1642/
                                                     epsilon: I.U
                                                                      steps: 458
                                                                                     ir: 0.0001
                                                                                                    evaluation reward: 1./1/64/US
                            memory length: 16579
                                                                                    lr: 0.0001
                                                    epsilon: 1.0
                                                                     steps: 152
                                                                                                   evaluation reward: 1.709302325
episode: 85
              score: 1.0
episode: 86
              score: 2.0
                            memory length: 16778
                                                    epsilon: 1.0
                                                                     steps: 199
                                                                                    lr: 0.0001
                                                                                                   evaluation reward: 1.712643678
episode: 87
              score: 1.0
                            memory length: 16949
                                                    epsilon: 1.0
                                                                     steps: 171
                                                                                    lr: 0.0001
                                                                                                   evaluation reward: 1.704545454
episode: 88
              score: 5.0
                            memory length: 17294
                                                    epsilon: 1.0
                                                                     steps: 345
                                                                                    1r: 0.0001
                                                                                                   evaluation reward: 1.741573033
episode: 89
                                                                                    lr: 0.0001
              score: 1.0
                            memory length: 17446
                                                    epsilon: 1.0
                                                                     steps: 152
                                                                                                   evaluation reward: 1.733333333
episode: 90
              score: 2.0
                            memory length: 17663
                                                    epsilon: 1.0
                                                                     steps: 217
                                                                                    1r: 0.0001
                                                                                                   evaluation reward: 1.736263736
                            memory length: 17882
                                                    epsilon: 1.0
                                                                     steps: 219
                                                                                    lr: 0.0001
                                                                                                   evaluation reward: 1.739130434
episode: 91
              score: 2.0
              score: 0.0
                            memory length: 18005
                                                    epsilon: 1.0
                                                                     steps: 123
                                                                                    lr: 0.0001
                                                                                                   evaluation reward: 1.720430107
episode: 92
                            memory length: 18222
                                                                                   lr: 0.0001
episode: 93
              score: 2.0
                                                    epsilon: 1.0
                                                                     steps: 217
                                                                                                   evaluation reward: 1.723404255
                            memory length: 18346
                                                    epsilon: 1.0
                                                                     steps: 124
                                                                                    lr: 0.0001
                                                                                                   evaluation reward: 1.705263157
episode: 94
              score: 0.0
              score: 0.0
episode: 95
                            memory length: 18470
                                                    epsilon: 1.0
                                                                     steps: 124
                                                                                   lr: 0.0001
                                                                                                   evaluation reward: 1.6875
                            memory length: 18639
episode: 96
                                                                     steps: 169
              score: 1.0
                                                    epsilon: 1.0
                                                                                    1r: 0.0001
                                                                                                   evaluation reward: 1.680412371
episode: 97
              score: 2.0
                            memory length: 18857
                                                    epsilon: 1.0
                                                                     steps: 218
                                                                                    lr: 0.0001
                                                                                                   evaluation reward: 1.683673469
episode: 98
              score: 1.0
                            memory length: 19009
                                                    epsilon: 1.0
                                                                     steps: 152
                                                                                    lr: 0.0001
                                                                                                   evaluation reward: 1.676767676
                            memory length: 19224
episode: 99
                                                                     steps: 215
                                                                                    lr: 0.0001
                                                                                                   evaluation reward: 1.69
              score: 3.0
                                                    epsilon: 1.0
episode: 100
               score: 4.0
                             memory length: 19540
                                                     epsilon: 1.0
                                                                      steps: 316
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.7
episode: 101
               score: 2.0
                             memory length: 19738
                                                     epsilon: 1.0
                                                                      steps: 198
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.72
episode: 102
               score: 5.0
                             memory length: 20074
                                                     epsilon: 1.0
                                                                      steps: 336
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.73
               score: 2.0
                             memory length: 20255
                                                     epsilon: 1.0
                                                                      steps: 181
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.74
episode: 103
episode: 104
               score: 2.0
                             memory length: 20454
                                                     epsilon: 1.0
                                                                      steps: 199
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.74
episode: 105
               score: 4.0
                             memory length: 20753
                                                     epsilon: 1.0
                                                                      steps: 299
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.78
               score: 0.0
                             memory length: 20877
episode: 106
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.77
episode: 107
               score: 1.0
                             memory length: 21028
                                                     epsilon: 1.0
                                                                      steps: 151
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.76
episode: 108
                             memory length: 21198
                                                     epsilon: 1.0
                                                                      steps: 170
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.75
               score: 1.0
episode: 109
               score: 1.0
                             memory length: 21370
                                                     epsilon: 1.0
                                                                      steps: 172
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.74
                             memory length: 21637
episode: 110
                                                     epsilon: 1.0
               score: 3.0
                                                                      steps: 267
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.77
episode: 111
                             memory length: 21791
                                                     epsilon: 1.0
                                                                      steps: 154
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.76
               score: 1.0
episode: 112
               score: 1.0
                             memory length: 21942
                                                     epsilon: 1.0
                                                                      steps: 151
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.77
episode: 113
                             memory length: 22161
                                                     epsilon: 1.0
                                                                      steps: 219
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.77
               score: 2.0
episode: 114
               score: 0.0
                             memory length: 22285
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.77
                             memory length: 22579
                                                     epsilon: 1.0
episode: 115
               score: 4.0
                                                                      steps: 294
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.79
episode: 116
               score: 2.0
                             memory length: 22780
                                                     epsilon: 1.0
                                                                      steps: 201
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.79
episode: 117
               score: 0.0
                             memory length: 22903
                                                     epsilon: 1.0
                                                                      steps: 123
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.76
episode: 118
               score: 1.0
                             memory length: 23055
                                                     epsilon: 1.0
                                                                      steps: 152
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.76
episode: 119
               score: 1.0
                             memory length: 23207
                                                     epsilon: 1.0
                                                                      steps: 152
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.77
                                                                      steps: 154
episode: 120
               score: 1.0
                             memory length: 23361
                                                     epsilon: 1.0
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.76
episode: 121
               score: 0.0
                             memory length: 23485
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.75
episode: 122
               score: 2.0
                             memory length: 23684
                                                     epsilon: 1.0
                                                                      steps: 199
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.76
               score: 0.0
                             memory length: 23808
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.75
episode: 123
episode: 124
                                                     epsilon: 1.0
               score: 0.0
                             memory length: 23931
                                                                      steps: 123
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.75
episode: 125
               score: 0.0
                             memory length: 24054
                                                     epsilon: 1.0
                                                                      steps: 123
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.73
episode: 126
               score: 1.0
                             memory length: 24205
                                                     epsilon: 1.0
                                                                      steps: 151
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.71
                             memory length: 24357
                                                     epsilon: 1.0
                                                                                     lr: 0.0001
episode: 127
               score: 1.0
                                                                      steps: 152
                                                                                                    evaluation reward: 1.7
episode: 128
               score: 0.0
                             memory length: 24481
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.69
episode: 129
               score: 3.0
                             memory length: 24752
                                                     epsilon: 1.0
                                                                      steps: 271
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.72
episode: 130
                             memory length: 24904
                                                     epsilon: 1.0
                                                                      steps: 152
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.71
               score: 1.0
episode: 131
               score: 0.0
                             memory length: 25028
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.69
episode: 132
               score: 1.0
                             memory length: 25198
                                                     epsilon: 1.0
                                                                      steps: 170
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.7
episode: 133
               score: 2.0
                             memory length: 25397
                                                     epsilon: 1.0
                                                                      steps: 199
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.69
                                                                      steps: 170
episode: 134
               score: 1.0
                             memory length: 25567
                                                     epsilon: 1.0
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.67
episode: 135
               score: 0.0
                             memory length: 25691
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.65
episode: 136
               score: 1.0
                             memory length: 25843
                                                     epsilon: 1.0
                                                                      steps: 152
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.66
                             memory length: 26013
                                                     epsilon: 1.0
                                                                                                    evaluation reward: 1.63
episode: 137
               score: 1.0
                                                                      steps: 170
                                                                                     lr: 0.0001
episode: 138
               score: 0.0
                             memory length: 26137
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.63
                             memory length: 26356
                                                     epsilon: 1.0
                                                                      steps: 219
                                                                                     lr: 0.0001
episode: 139
               score: 2.0
                                                                                                    evaluation reward: 1.6
episode: 140
               score: 0.0
                             memory length: 26480
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.58
                             memory length: 26697
episode: 141
                                                     epsilon: 1.0
                                                                                     lr: 0.0001
               score: 2.0
                                                                      steps: 217
                                                                                                    evaluation reward: 1.59
episode: 142
               score: 1.0
                             memory length: 26849
                                                     epsilon: 1.0
                                                                      steps: 152
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.59
episode: 143
               score: 1.0
                             memory length: 27019
                                                     epsilon: 1.0
                                                                      steps: 170
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.59
                             memory length: 27236
episode: 144
               score: 2.0
                                                     epsilon: 1.0
                                                                      steps: 217
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.6
episode: 145
               score: 3.0
                             memory length: 27464
                                                     epsilon: 1.0
                                                                      steps: 228
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.62
                             memory length: 27588
episode: 146
               score: 0.0
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.59
                             memory length: 27712
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                                    evaluation reward: 1.59
episode: 147
               score: 0.0
                                                                                     lr: 0.0001
episode: 148
               score: 0.0
                             memory length: 27836
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.54
                             memory length: 28053
                                                     epsilon: 1.0
                                                                      steps: 217
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.54
episode: 149
               score: 2.0
episode: 150
               score: 2.0
                             memory length: 28234
                                                     epsilon: 1.0
                                                                      steps: 181
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.55
                                                                      steps: 266
episode: 151
               score: 3.0
                             memory length: 28500
                                                     epsilon: 1.0
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.57
episode: 152
               score: 2.0
                             memory length: 28723
                                                     epsilon: 1.0
                                                                      steps: 223
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.58
                                                                                                    evaluation reward: 1.58
episode: 153
               score: 0.0
                             memory length: 28847
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                     lr: 0.0001
episode: 154
               score: 0.0
                             memory length: 28971
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.57
episode: 155
               score: 0.0
                             memory length: 29094
                                                     epsilon: 1.0
                                                                      steps: 123
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.53
episode: 156
               score: 0.0
                             memory length: 29218
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.51
episode: 157
               score: 3.0
                             memory length: 29463
                                                     epsilon: 1.0
                                                                      steps: 245
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.54
                             memory length: 29682
                                                                      steps: 219
                                                                                                    evaluation reward: 1.55
episode: 158
                                                     epsilon: 1.0
                                                                                     lr: 0.0001
               score: 2.0
episode: 159
               score: 1.0
                             memory length: 29834
                                                     epsilon: 1.0
                                                                      steps: 152
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.56
episode: 160
               score: 0.0
                             memory length: 29958
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.54
episode: 161
                             memory length: 30177
                                                     epsilon: 1.0
                                                                      steps: 219
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.56
               score: 2.0
episode: 162
               score: 0.0
                             memory length: 30300
                                                     epsilon: 1.0
                                                                      steps: 123
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.55
episode: 163
               score: 3.0
                             memory length: 30528
                                                     epsilon: 1.0
                                                                      steps: 228
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.56
               score: 3.0
episode: 164
                             memory length: 30758
                                                     epsilon: 1.0
                                                                      steps: 230
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.59
               score: 0.0
                             memory length: 30881
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.57
episode: 165
                                                     epsilon: 1.0
                                                                      steps: 123
episode: 166
               score: 2.0
                             memory length: 31101
                                                     epsilon: 1.0
                                                                      steps: 220
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.59
                                                                                     lr: 0.0001
episode: 167
               score: 1.0
                             memory length: 31253
                                                     epsilon: 1.0
                                                                      steps: 152
                                                                                                    evaluation reward: 1.6
                                                                                                    evaluation reward: 1.57
episode: 168
               score: 1.0
                             memory length: 31405
                                                     epsilon: 1.0
                                                                      steps: 152
                                                                                     lr: 0.0001
```

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episode: 169
               score: 2.0
                             memory length: 31608
                                                     epsilon: 1.0
                                                                      steps: 203
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.57
               score: 2.0
                             memory length: 31824
                                                                                    lr: 0.0001
episode: 170
                                                     epsilon: 1.0
                                                                      steps: 216
                                                                                                    evaluation reward: 1.58
episode: 171
               score: 2.0
                             memory length: 32023
                                                     epsilon: 1.0
                                                                      steps: 199
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.58
                                                                      steps: 169
               score: 1.0
                             memory length: 32192
                                                     epsilon: 1.0
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.57
episode: 172
episode: 173
               score: 1.0
                             memory length: 32363
                                                     epsilon: 1.0
                                                                      steps: 171
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.56
episode: 174
               score: 5.0
                             memory length: 32671
                                                     epsilon: 1.0
                                                                      steps: 308
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.6
                                                     epsilon: 1.0
                                                                                    lr: 0.0001
episode: 175
               score: 1.0
                             memory length: 32842
                                                                      steps: 171
                                                                                                    evaluation reward: 1.57
episode: 176
               score: 3.0
                             memory length: 33090
                                                     epsilon: 1.0
                                                                      steps: 248
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.58
episode: 177
               score: 1.0
                             memory length: 33242
                                                     epsilon: 1.0
                                                                      steps: 152
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.54
               score: 0.0
                             memory length: 33366
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.51
episode: 178
                             memory length: 33489
episode: 179
                                                     epsilon: 1.0
                                                                                    lr: 0.0001
               score: 0.0
                                                                      steps: 123
                                                                                                    evaluation reward: 1.49
episode: 180
               score: 2.0
                             memory length: 33688
                                                     epsilon: 1.0
                                                                      steps: 199
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.51
episode: 181
               score: 0.0
                             memory length: 33812
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.49
                             memory length: 34032
episode: 182
               score: 2.0
                                                     epsilon: 1.0
                                                                      steps: 220
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.5
episode: 183
               score: 2.0
                             memory length: 34230
                                                     epsilon: 1.0
                                                                      steps: 198
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.48
                             memory length: 34354
episode: 184
               score: 0.0
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.37
episode: 185
               score: 3.0
                             memory length: 34582
                                                     epsilon: 1.0
                                                                      steps: 228
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.39
episode: 186
               score: 0.0
                            memory length: 34706
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.37
episode: 187
               score: 0.0
                             memory length: 34829
                                                     epsilon: 1.0
                                                                      steps: 123
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.36
episode: 188
               score: 2.0
                             memory length: 35048
                                                     epsilon: 1.0
                                                                      steps: 219
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.33
                                                                      steps: 201
episode: 189
               score: 2.0
                             memory length: 35249
                                                     epsilon: 1.0
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.34
episode: 190
               score: 4.0
                             memory length: 35562
                                                     epsilon: 1.0
                                                                      steps: 313
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.36
episode: 191
               score: 0.0
                             memory length: 35686
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.34
               score: 2.0
                            memory length: 35904
                                                     epsilon: 1.0
                                                                      steps: 218
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.36
episode: 192
                             memory length: 36102
                                                     epsilon: 1.0
                                                                                    lr: 0.0001
episode: 193
               score: 2.0
                                                                      steps: 198
                                                                                                    evaluation reward: 1.36
episode: 194
               score: 3.0
                             memory length: 36347
                                                     epsilon: 1.0
                                                                      steps: 245
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.39
               score: 3.0
episode: 195
                             memory length: 36593
                                                     epsilon: 1.0
                                                                      steps: 246
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.42
                             memory length: 36820
episode: 196
                                                     epsilon: 1.0
                                                                      steps: 227
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.44
               score: 3.0
episode: 197
                             memory length: 36991
                                                     epsilon: 1.0
                                                                      steps: 171
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.43
               score: 1.0
episode: 198
               score: 1.0
                             memory length: 37161
                                                     epsilon: 1.0
                                                                      steps: 170
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.43
                             memory length: 37285
episode: 199
               score: 0.0
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.4
episode: 200
               score: 1.0
                             memory length: 37457
                                                     epsilon: 1.0
                                                                      steps: 172
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.37
                                                                      steps: 124
                             memory length: 37581
                                                     epsilon: 1.0
episode: 201
               score: 0.0
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.35
episode: 202
               score: 6.0
                             memory length: 37963
                                                     epsilon: 1.0
                                                                      steps: 382
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.36
                                                                                    lr: 0.0001
episode: 203
               score: 3.0
                             memory length: 38208
                                                     epsilon: 1.0
                                                                      steps: 245
                                                                                                    evaluation reward: 1.37
                                                     epsilon: 1.0
episode: 204
               score: 0.0
                             memory length: 38332
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.35
episode: 205
               score: 1.0
                             memory length: 38502
                                                     epsilon: 1.0
                                                                      steps: 170
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.32
                             memory length: 38625
                                                                                    lr: 0.0001
episode: 206
               score: 0.0
                                                     epsilon: 1.0
                                                                      steps: 123
                                                                                                    evaluation reward: 1.32
episode: 207
               score: 2.0
                             memory length: 38844
                                                     epsilon: 1.0
                                                                      steps: 219
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.33
                             memory length: 39017
                                                     epsilon: 1.0
                                                                      steps: 173
episode: 208
               score: 1.0
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.33
episode: 209
               score: 2.0
                             memory length: 39218
                                                     epsilon: 1.0
                                                                      steps: 201
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.34
                             memory length: 39370
                                                                                                    evaluation reward: 1.32
episode: 210
                                                     epsilon: 1.0
                                                                      steps: 152
                                                                                    lr: 0.0001
               score: 1.0
               score: 4.0
                             memory length: 39658
                                                     epsilon: 1.0
                                                                      steps: 288
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.35
episode: 211
episode: 212
               score: 0.0
                             memory length: 39782
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.34
                             memory length: 39953
                                                     epsilon: 1.0
                                                                      steps: 171
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.33
episode: 213
               score: 1.0
episode: 214
               score: 3.0
                             memory length: 40200
                                                     epsilon: 1.0
                                                                      steps: 247
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.36
episode: 215
               score: 2.0
                             memory length: 40417
                                                     epsilon: 1.0
                                                                      steps: 217
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.34
episode: 216
                             memory length: 40587
                                                     epsilon: 1.0
                                                                      steps: 170
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.33
               score: 1.0
episode: 217
               score: 3.0
                             memory length: 40836
                                                     epsilon: 1.0
                                                                      steps: 249
                                                                                    1r: 0.0001
                                                                                                    evaluation reward: 1.36
episode: 218
               score: 0.0
                             memory length: 40960
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.35
episode: 219
               score: 3.0
                             memory length: 41210
                                                     epsilon: 1.0
                                                                      steps: 250
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.37
                             memory length: 41458
                                                                      steps: 248
                                                                                    lr: 0.0001
episode: 220
               score: 3.0
                                                     epsilon: 1.0
                                                                                                    evaluation reward: 1.39
episode: 221
               score: 0.0
                             memory length: 41582
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.39
episode: 222
               score: 0.0
                             memory length: 41705
                                                     epsilon: 1.0
                                                                      steps: 123
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.37
episode: 223
               score: 2.0
                             memory length: 41924
                                                     epsilon: 1.0
                                                                      steps: 219
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.39
episode: 224
               score: 0.0
                             memory length: 42047
                                                     epsilon: 1.0
                                                                      steps: 123
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.39
                             memory length: 42171
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
episode: 225
               score: 0.0
                                                                                                    evaluation reward: 1.39
episode: 226
               score: 2.0
                            memory length: 42369
                                                     epsilon: 1.0
                                                                      steps: 198
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.4
                             memory length: 42493
                                                                      steps: 124
episode: 227
               score: 0.0
                                                     epsilon: 1.0
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.39
episode: 228
               score: 7.0
                             memory length: 42794
                                                     epsilon: 1.0
                                                                      steps: 301
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.46
episode: 229
               score: 3.0
                             memory length: 43038
                                                     epsilon: 1.0
                                                                      steps: 244
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.46
                             memory length: 43211
                                                     epsilon: 1.0
                                                                      steps: 173
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.46
episode: 230
               score: 1.0
episode: 231
               score: 2.0
                             memory length: 43391
                                                     epsilon: 1.0
                                                                      steps: 180
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.48
                             memory length: 43562
episode: 232
               score: 1.0
                                                     epsilon: 1.0
                                                                      steps: 171
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.48
episode: 233
               score: 3.0
                             memory length: 43807
                                                     epsilon: 1.0
                                                                      steps: 245
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.49
episode: 234
               score: 1.0
                             memory length: 43978
                                                     epsilon: 1.0
                                                                      steps: 171
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.49
                                                     epsilon: 1.0
episode: 235
               score: 0.0
                             memory length: 44101
                                                                      steps: 123
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.49
episode: 236
               score: 3.0
                             memory length: 44367
                                                     epsilon: 1.0
                                                                      steps: 266
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.51
episode: 237
               score: 6.0
                             memory length: 44742
                                                     epsilon: 1.0
                                                                      steps: 375
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.56
episode: 238
               score: 3.0
                             memory length: 44990
                                                     epsilon: 1.0
                                                                      steps: 248
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.59
                                                     epsilon: 1.0
episode: 239
               score: 1.0
                             memory length: 45162
                                                                      steps: 172
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.58
               score: 1.0
episode: 240
                             memory length: 45333
                                                     epsilon: 1.0
                                                                      steps: 171
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.59
episode: 241
               score: 3.0
                             memory length: 45559
                                                     epsilon: 1.0
                                                                      steps: 226
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.6
episode: 242
                             memory length: 45729
                                                     epsilon: 1.0
                                                                      steps: 170
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.6
               score: 1.0
episode: 243
               score: 1.0
                            memory length: 45899
                                                     epsilon: 1.0
                                                                      steps: 170
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.6
                             memory length: 46022
                                                                                                    evaluation reward: 1.58
episode: 244
               score: 0.0
                                                     epsilon: 1.0
                                                                      steps: 123
                                                                                    lr: 0.0001
                             memory length: 46223
episode: 245
               score: 2.0
                                                     epsilon: 1.0
                                                                      steps: 201
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.57
                             memory length: 46444
                                                                                    lr: 0.0001
episode: 246
               score: 2.0
                                                     epsilon: 1.0
                                                                      steps: 221
                                                                                                    evaluation reward: 1.59
episode: 247
               score: 0.0
                             memory length: 46568
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.59
episode: 248
               score: 0.0
                             memory length: 46692
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    1r: 0.0001
                                                                                                    evaluation reward: 1.59
episode: 249
               score: 0.0
                             memory length: 46816
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.57
episode: 250
               score: 4.0
                             memory length: 47075
                                                     epsilon: 1.0
                                                                      steps: 259
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.59
episode: 251
               score: 2.0
                             memory length: 47274
                                                                      steps: 199
                                                     epsilon: 1.0
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.58
episode: 252
               score: 0.0
                             memory length: 47398
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.56
episode: 253
               score: 2.0
                             memory length: 47620
                                                     epsilon: 1.0
                                                                      steps: 222
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.58
```

```
score: 0.0
                            memory length: 47744
                                                                      steps: 124
                                                                                    lr: 0.0001
episode: 254
                                                     epsilon: 1.0
                                                                                                    evaluation reward: 1.58
episode: 255
               score: 2.0
                            memory length: 47942
                                                     epsilon: 1.0
                                                                      steps: 198
                                                                                    1r: 0.0001
                                                                                                    evaluation reward: 1.6
episode: 256
                             memory length: 48111
                                                     epsilon: 1.0
                                                                      steps: 169
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.61
               score: 1.0
episode: 257
               score: 4.0
                             memory length: 48408
                                                     epsilon: 1.0
                                                                      steps: 297
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.62
               score: 5.0
                             memory length: 48715
                                                     epsilon: 1.0
                                                                      steps: 307
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.65
episode: 258
episode: 259
               score: 3.0
                             memory length: 48943
                                                     epsilon: 1.0
                                                                      steps: 228
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.67
                             memory length: 49067
                                                     epsilon: 1.0
episode: 260
               score: 0.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.67
episode: 261
               score: 0.0
                             memory length: 49191
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.65
episode: 262
               score: 2.0
                             memory length: 49390
                                                     epsilon: 1.0
                                                                      steps: 199
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.67
                                                                      steps: 220
                             memory length: 49610
                                                     epsilon: 1.0
                                                                                                    evaluation reward: 1.66
episode: 263
               score: 2.0
                                                                                    lr: 0.0001
episode: 264
               score: 1.0
                             memory length: 49781
                                                     epsilon: 1.0
                                                                      steps: 171
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.64
                             memory length: 50080
episode: 265
                                                     epsilon: 1.0
                                                                      steps: 299
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.68
               score: 4.0
episode: 266
               score: 3.0
                             memory length: 50346
                                                     epsilon: 1.0
                                                                      steps: 266
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.69
episode: 267
               score: 2.0
                             memory length: 50549
                                                     epsilon: 1.0
                                                                      steps: 203
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.7
episode: 268
               score: 0.0
                             memory length: 50673
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.69
episode: 269
               score: 2.0
                            memory length: 50889
                                                     epsilon: 1.0
                                                                      steps: 216
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.69
                                                                      steps: 229
episode: 270
               score: 3.0
                             memory length: 51118
                                                     epsilon: 1.0
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.7
episode: 271
               score: 2.0
                             memory length: 51318
                                                     epsilon: 1.0
                                                                      steps: 200
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.7
                            memory length: 51583
episode: 272
               score: 3.0
                                                     epsilon: 1.0
                                                                      steps: 265
                                                                                    1r: 0.0001
                                                                                                    evaluation reward: 1.72
episode: 273
               score: 0.0
                             memory length: 51707
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.71
episode: 274
               score: 0.0
                             memory length: 51831
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.66
episode: 275
               score: 1.0
                             memory length: 52000
                                                     epsilon: 1.0
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.66
                                                                      steps: 169
episode: 276
               score: 0.0
                             memory length: 52123
                                                     epsilon: 1.0
                                                                      steps: 123
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.63
                             memory length: 52322
                                                     epsilon: 1.0
episode: 277
               score: 2.0
                                                                      steps: 199
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.64
episode: 278
               score: 1.0
                             memory length: 52492
                                                     epsilon: 1.0
                                                                      steps: 170
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.65
episode: 279
               score: 0.0
                             memory length: 52616
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.65
episode: 280
               score: 0.0
                             memory length: 52740
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.63
episode: 281
               score: 2.0
                             memory length: 52958
                                                     epsilon: 1.0
                                                                      steps: 218
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.65
                             memory length: 53175
                                                     epsilon: 1.0
episode: 282
               score: 2.0
                                                                      steps: 217
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.65
episode: 283
               score: 1.0
                             memory length: 53347
                                                     epsilon: 1.0
                                                                      steps: 172
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.64
                             memory length: 53547
episode: 284
               score: 2.0
                                                     epsilon: 1.0
                                                                      steps: 200
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.66
episode: 285
               score: 0.0
                             memory length: 53670
                                                     epsilon: 1.0
                                                                      steps: 123
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.63
episode: 286
               score: 0.0
                            memory length: 53794
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.63
               score: 0.0
                             memory length: 53918
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.63
episode: 287
episode: 288
               score: 2.0
                             memory length: 54120
                                                     epsilon: 1.0
                                                                      steps: 202
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.63
               score: 4.0
                             memory length: 54413
                                                     epsilon: 1.0
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.65
episode: 289
                                                                      steps: 293
episode: 290
               score: 2.0
                             memory length: 54633
                                                     epsilon: 1.0
                                                                      steps: 220
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.63
episode: 291
               score: 0.0
                             memory length: 54756
                                                     epsilon: 1.0
                                                                      steps: 123
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.63
episode: 292
               score: 1.0
                             memory length: 54908
                                                     epsilon: 1.0
                                                                      steps: 152
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.62
episode: 293
               score: 1.0
                             memory length: 55081
                                                     epsilon: 1.0
                                                                      steps: 173
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.61
                             memory length: 55410
                                                     epsilon: 1.0
episode: 294
               score: 5.0
                                                                      steps: 329
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.63
episode: 295
               score: 1.0
                            memory length: 55579
                                                     epsilon: 1.0
                                                                      steps: 169
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.61
episode: 296
                             memory length: 55702
                                                     epsilon: 1.0
               score: 0.0
                                                                      steps: 123
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.58
episode: 297
               score: 2.0
                             memory length: 55902
                                                     epsilon: 1.0
                                                                      steps: 200
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.59
episode: 298
               score: 2.0
                             memory length: 56102
                                                     epsilon: 1.0
                                                                      steps: 200
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.6
                             memory length: 56275
episode: 299
               score: 1.0
                                                     epsilon: 1.0
                                                                      steps: 173
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.61
episode: 300
               score: 1.0
                            memory length: 56444
                                                     epsilon: 1.0
                                                                      steps: 169
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.61
                             memory length: 56643
                                                     epsilon: 1.0
                                                                      steps: 199
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.63
episode: 301
               score: 2.0
episode: 302
               score: 0.0
                             memory length: 56766
                                                     epsilon: 1.0
                                                                      steps: 123
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.57
episode: 303
               score: 1.0
                             memory length: 56938
                                                     epsilon: 1.0
                                                                      steps: 172
                                                                                    1r: 0.0001
                                                                                                    evaluation reward: 1.55
episode: 304
               score: 2.0
                             memory length: 57138
                                                     epsilon: 1.0
                                                                      steps: 200
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.57
episode: 305
               score: 2.0
                             memory length: 57337
                                                     epsilon: 1.0
                                                                      steps: 199
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.58
               score: 2.0
                             memory length: 57535
                                                     epsilon: 1.0
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.6
episode: 306
                                                                      steps: 198
episode: 307
               score: 1.0
                             memory length: 57705
                                                     epsilon: 1.0
                                                                      steps: 170
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.59
                                                                      steps: 123
episode: 308
               score: 0.0
                             memory length: 57828
                                                     epsilon: 1.0
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.58
episode: 309
               score: 0.0
                             memory length: 57952
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.56
                             memory length: 58152
episode: 310
                                                     epsilon: 1.0
                                                                      steps: 200
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.57
               score: 2.0
episode: 311
               score: 0.0
                             memory length: 58276
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.53
episode: 312
               score: 2.0
                             memory length: 58477
                                                     epsilon: 1.0
                                                                      steps: 201
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.55
                             memory length: 58676
                                                     epsilon: 1.0
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.56
episode: 313
               score: 2.0
                                                                      steps: 199
episode: 314
               score: 3.0
                             memory length: 58906
                                                     epsilon: 1.0
                                                                      steps: 230
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.56
episode: 315
               score: 2.0
                             memory length: 59106
                                                     epsilon: 1.0
                                                                      steps: 200
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.56
episode: 316
                             memory length: 59405
                                                     epsilon: 1.0
                                                                      steps: 299
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.6
               score: 5.0
episode: 317
               score: 2.0
                             memory length: 59604
                                                     epsilon: 1.0
                                                                      steps: 199
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.59
                             memory length: 59802
                                                     epsilon: 1.0
                                                                      steps: 198
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.61
episode: 318
               score: 2.0
episode: 319
               score: 0.0
                             memory length: 59926
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.58
episode: 320
               score: 1.0
                             memory length: 60096
                                                     epsilon: 1.0
                                                                      steps: 170
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.56
episode: 321
               score: 3.0
                             memory length: 60363
                                                     epsilon: 1.0
                                                                      steps: 267
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.59
episode: 322
               score: 3.0
                             memory length: 60592
                                                     epsilon: 1.0
                                                                      steps: 229
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.62
               score: 5.0
                             memory length: 60919
                                                     epsilon: 1.0
                                                                      steps: 327
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.65
episode: 323
                                                                                    lr: 0.0001
episode: 324
               score: 4.0
                             memory length: 61195
                                                     epsilon: 1.0
                                                                      steps: 276
                                                                                                    evaluation reward: 1.69
episode: 325
               score: 2.0
                             memory length: 61414
                                                     epsilon: 1.0
                                                                      steps: 219
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.71
episode: 326
               score: 0.0
                             memory length: 61537
                                                     epsilon: 1.0
                                                                      steps: 123
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.69
                             memory length: 61661
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.69
episode: 327
               score: 0.0
episode: 328
               score: 1.0
                             memory length: 61831
                                                     epsilon: 1.0
                                                                      steps: 170
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.63
episode: 329
               score: 1.0
                             memory length: 61982
                                                     epsilon: 1.0
                                                                      steps: 151
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.61
                             memory length: 62106
episode: 330
               score: 0.0
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.6
episode: 331
               score: 0.0
                             memory length: 62230
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.58
                                                                      steps: 170
                             memory length: 62400
                                                     epsilon: 1.0
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.58
episode: 332
               score: 1.0
episode: 333
               score: 2.0
                             memory length: 62600
                                                     epsilon: 1.0
                                                                      steps: 200
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.57
                             memory length: 62724
                                                                                    lr: 0.0001
episode: 334
               score: 0.0
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                                    evaluation reward: 1.56
episode: 335
               score: 0.0
                             memory length: 62847
                                                     epsilon: 1.0
                                                                      steps: 123
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.56
episode: 336
               score: 0.0
                             memory length: 62970
                                                     epsilon: 1.0
                                                                      steps: 123
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.53
               score: 0.0
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.47
episode: 337
                             memory length: 63094
               score: 3.0
                                                     epsilon: 1.0
episode: 338
                             memory length: 63339
                                                                      steps: 245
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.47
```

```
memory length: 63541
                                                     epsilon: 1.0
                                                                      steps: 202
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.48
episode: 339
               score: 2.0
episode: 340
               score: 1.0
                            memory length: 63711
                                                     epsilon: 1.0
                                                                      steps: 170
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.48
               score: 0.0
episode: 341
                            memory length: 63835
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    1r: 0.0001
                                                                                                    evaluation reward: 1.45
episode: 342
                             memory length: 64004
                                                     epsilon: 1.0
                                                                      steps: 169
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.45
               score: 1.0
episode: 343
               score: 0.0
                             memory length: 64128
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.44
episode: 344
               score: 0.0
                             memory length: 64252
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.44
episode: 345
               score: 1.0
                             memory length: 64404
                                                     epsilon: 1.0
                                                                      steps: 152
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.43
                             memory length: 64603
                                                     epsilon: 1.0
episode: 346
               score: 2.0
                                                                      steps: 199
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.43
episode: 347
               score: 2.0
                             memory length: 64823
                                                     epsilon: 1.0
                                                                      steps: 220
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.45
episode: 348
                                                     epsilon: 1.0
                                                                                    lr: 0.0001
               score: 1.0
                             memory length: 64993
                                                                      steps: 170
                                                                                                    evaluation reward: 1.46
episode: 349
               score: 4.0
                             memory length: 65290
                                                     epsilon: 1.0
                                                                      steps: 297
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.5
episode: 350
               score: 0.0
                             memory length: 65414
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.46
                             memory length: 65566
episode: 351
                                                     epsilon: 1.0
                                                                      steps: 152
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.45
               score: 1.0
episode: 352
               score: 2.0
                             memory length: 65783
                                                     epsilon: 1.0
                                                                      steps: 217
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.47
episode: 353
               score: 0.0
                             memory length: 65907
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.45
episode: 354
               score: 2.0
                             memory length: 66123
                                                     epsilon: 1.0
                                                                      steps: 216
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.47
episode: 355
               score: 0.0
                            memory length: 66247
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.45
                                                                      steps: 124
                             memory length: 66371
                                                     epsilon: 1.0
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.44
episode: 356
               score: 0.0
episode: 357
               score: 1.0
                             memory length: 66543
                                                     epsilon: 1.0
                                                                      steps: 172
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.41
                                                                                    lr: 0.0001
episode: 358
               score: 2.0
                            memory length: 66742
                                                     epsilon: 1.0
                                                                      steps: 199
                                                                                                    evaluation reward: 1.38
                                                     epsilon: 1.0
episode: 359
               score: 2.0
                             memory length: 66940
                                                                      steps: 198
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.37
episode: 360
               score: 2.0
                             memory length: 67160
                                                     epsilon: 1.0
                                                                      steps: 220
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.39
episode: 361
               score: 0.0
                             memory length: 67284
                                                     epsilon: 1.0
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.39
                                                                      steps: 124
episode: 362
               score: 1.0
                             memory length: 67454
                                                     epsilon: 1.0
                                                                      steps: 170
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.38
episode: 363
               score: 3.0
                             memory length: 67686
                                                     epsilon: 1.0
                                                                      steps: 232
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.39
episode: 364
               score: 3.0
                             memory length: 67933
                                                     epsilon: 1.0
                                                                      steps: 247
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.41
                                                                                    lr: 0.0001
episode: 365
               score: 0.0
                             memory length: 68057
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                                    evaluation reward: 1.37
episode: 366
               score: 4.0
                             memory length: 68352
                                                     epsilon: 1.0
                                                                      steps: 295
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.38
episode: 367
               score: 1.0
                             memory length: 68504
                                                     epsilon: 1.0
                                                                      steps: 152
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.37
                             memory length: 68721
episode: 368
                                                     epsilon: 1.0
               score: 2.0
                                                                      steps: 217
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.39
episode: 369
               score: 2.0
                             memory length: 68938
                                                     epsilon: 1.0
                                                                      steps: 217
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.39
                             memory length: 69156
episode: 370
               score: 2.0
                                                     epsilon: 1.0
                                                                      steps: 218
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.38
episode: 371
               score: 4.0
                             memory length: 69452
                                                     epsilon: 1.0
                                                                      steps: 296
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.4
episode: 372
               score: 0.0
                             memory length: 69575
                                                     epsilon: 1.0
                                                                      steps: 123
                                                                                    1r: 0.0001
                                                                                                    evaluation reward: 1.37
               score: 0.0
                             memory length: 69699
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.37
episode: 373
episode: 374
               score: 2.0
                             memory length: 69898
                                                     epsilon: 1.0
                                                                      steps: 199
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.39
                             memory length: 70152
                                                     epsilon: 1.0
                                                                                    lr: 0.0001
episode: 375
               score: 3.0
                                                                      steps: 254
                                                                                                    evaluation reward: 1.41
episode: 376
               score: 0.0
                             memory length: 70276
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.41
episode: 377
               score: 5.0
                             memory length: 70624
                                                     epsilon: 1.0
                                                                      steps: 348
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.44
episode: 378
               score: 1.0
                             memory length: 70796
                                                     epsilon: 1.0
                                                                      steps: 172
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.44
episode: 379
               score: 5.0
                             memory length: 71104
                                                     epsilon: 1.0
                                                                      steps: 308
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.49
                             memory length: 71322
                                                     epsilon: 1.0
episode: 380
               score: 2.0
                                                                      steps: 218
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.51
episode: 381
               score: 0.0
                             memory length: 71445
                                                     epsilon: 1.0
                                                                      steps: 123
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.49
episode: 382
               score: 1.0
                             memory length: 71597
                                                     epsilon: 1.0
                                                                      steps: 152
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.48
episode: 383
               score: 0.0
                             memory length: 71720
                                                     epsilon: 1.0
                                                                      steps: 123
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.47
episode: 384
               score: 2.0
                             memory length: 71919
                                                     epsilon: 1.0
                                                                      steps: 199
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.47
episode: 385
                             memory length: 72167
                                                     epsilon: 1.0
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.5
               score: 3.0
                                                                      steps: 248
episode: 386
               score: 2.0
                            memory length: 72366
                                                     epsilon: 1.0
                                                                      steps: 199
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.52
                             memory length: 72517
                                                     epsilon: 1.0
                                                                      steps: 151
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.53
episode: 387
               score: 1.0
episode: 388
               score: 2.0
                             memory length: 72735
                                                     epsilon: 1.0
                                                                      steps: 218
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.53
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.49
episode: 389
               score: 0.0
                             memory length: 72859
                                                     epsilon: 1.0
                                                                      steps: 124
episode: 390
               score: 0.0
                             memory length: 72982
                                                     epsilon: 1.0
                                                                      steps: 123
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.47
episode: 391
               score: 2.0
                             memory length: 73183
                                                     epsilon: 1.0
                                                                      steps: 201
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.49
               score: 7.0
                             memory length: 73570
                                                     epsilon: 1.0
                                                                      steps: 387
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.55
episode: 392
episode: 393
               score: 0.0
                             memory length: 73693
                                                     epsilon: 1.0
                                                                      steps: 123
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.54
                             memory length: 74004
                                                     epsilon: 1.0
episode: 394
               score: 5.0
                                                                      steps: 311
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.54
episode: 395
               score: 0.0
                             memory length: 74127
                                                     epsilon: 1.0
                                                                      steps: 123
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.53
                                                                                    lr: 0.0001
episode: 396
               score: 0.0
                             memory length: 74251
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                                    evaluation reward: 1.53
               score: 0.0
                             memory length: 74375
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.51
episode: 397
episode: 398
               score: 2.0
                             memory length: 74595
                                                     epsilon: 1.0
                                                                      steps: 220
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.51
                             memory length: 74746
episode: 399
                                                     epsilon: 1.0
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.51
               score: 1.0
                                                                      steps: 151
episode: 400
               score: 2.0
                             memory length: 74969
                                                     epsilon: 1.0
                                                                      steps: 223
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.52
episode: 401
               score: 1.0
                             memory length: 75140
                                                     epsilon: 1.0
                                                                      steps: 171
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.51
episode: 402
               score: 3.0
                             memory length: 75349
                                                     epsilon: 1.0
                                                                      steps: 209
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.54
episode: 403
               score: 2.0
                             memory length: 75547
                                                     epsilon: 1.0
                                                                      steps: 198
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.55
episode: 404
               score: 1.0
                             memory length: 75719
                                                     epsilon: 1.0
                                                                      steps: 172
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.54
episode: 405
               score: 2.0
                             memory length: 75938
                                                     epsilon: 1.0
                                                                      steps: 219
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.54
episode: 406
               score: 1.0
                             memory length: 76090
                                                     epsilon: 1.0
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.53
                                                                      steps: 152
episode: 407
               score: 1.0
                             memory length: 76243
                                                     epsilon: 1.0
                                                                      steps: 153
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.53
episode: 408
               score: 2.0
                             memory length: 76441
                                                     epsilon: 1.0
                                                                      steps: 198
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.55
                             memory length: 76670
episode: 409
               score: 3.0
                                                     epsilon: 1.0
                                                                      steps: 229
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.58
episode: 410
               score: 3.0
                             memory length: 76900
                                                     epsilon: 1.0
                                                                      steps: 230
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.59
               score: 1.0
                             memory length: 77070
                                                     epsilon: 1.0
                                                                      steps: 170
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.6
episode: 411
               score: 0.0
episode: 412
                             memory length: 77193
                                                     epsilon: 1.0
                                                                      steps: 123
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.58
                             memory length: 77470
episode: 413
                                                     epsilon: 1.0
               score: 4.0
                                                                      steps: 277
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.6
episode: 414
               score: 1.0
                             memory length: 77623
                                                     epsilon: 1.0
                                                                      steps: 153
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.58
episode: 415
               score: 1.0
                             memory length: 77775
                                                     epsilon: 1.0
                                                                      steps: 152
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.57
                             memory length: 78046
episode: 416
                                                     epsilon: 1.0
                                                                                    lr: 0.0001
               score: 3.0
                                                                      steps: 271
                                                                                                    evaluation reward: 1.55
episode: 417
                                                     epsilon: 1.0
               score: 0.0
                             memory length: 78169
                                                                      steps: 123
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.53
                                                                      steps: 124
                             memory length: 78293
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.51
episode: 418
               score: 0.0
                                                     epsilon: 1.0
                                                     epsilon: 1.0
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.54
episode: 419
               score: 3.0
                             memory length: 78559
                                                                      steps: 266
episode: 420
               score: 4.0
                             memory length: 78835
                                                     epsilon: 1.0
                                                                      steps: 276
                                                                                    1r: 0.0001
                                                                                                    evaluation reward: 1.57
                                                     epsilon: 1.0
episode: 421
               score: 1.0
                             memory length: 78987
                                                                      steps: 152
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.55
episode: 422
               score: 3.0
                             memory length: 79200
                                                     epsilon: 1.0
                                                                      steps: 213
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.55
enisode: 423
               score: 3 0
                             memory length: 79447
                                                     ensilon. 1 N
                                                                      stens: 247
                                                                                                    evaluation reward: 1 53
```

```
memora renden. 13441
                                                     ећаттоп. т.о
chrange. 477
               DCOTE: 7.0
                                                                      acepa. 441
                                                                                                    evaruacion reward. 1.33
episode: 424
               score: 1.0
                             memory length: 79620
                                                     epsilon: 1.0
                                                                      steps: 173
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.5
                                                                      steps: 227
                                                                                     lr: 0.0001
episode: 425
               score: 3.0
                             memory length: 79847
                                                     epsilon: 1.0
                                                                                                    evaluation reward: 1.51
               score: 0.0
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.51
episode: 426
                             memory length: 79971
                                                     epsilon: 1.0
                                                                      steps: 124
episode: 427
               score: 1.0
                             memory length: 80123
                                                     epsilon: 1.0
                                                                      steps: 152
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.52
episode: 428
               score: 0.0
                             memory length: 80246
                                                     epsilon: 1.0
                                                                      steps: 123
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.51
episode: 429
               score: 0.0
                             memory length: 80369
                                                     epsilon: 1.0
                                                                      steps: 123
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.5
episode: 430
                             memory length: 80662
                                                     epsilon: 1.0
                                                                                     lr: 0.0001
               score: 4.0
                                                                      steps: 293
                                                                                                    evaluation reward: 1.54
episode: 431
               score: 0.0
                             memory length: 80786
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.54
                             memory length: 80937
episode: 432
               score: 1.0
                                                     epsilon: 1.0
                                                                      steps: 151
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.54
episode: 433
               score: 3.0
                             memory length: 81182
                                                     epsilon: 1.0
                                                                      steps: 245
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.55
episode: 434
                                                     epsilon: 1.0
               score: 3.0
                             memory length: 81434
                                                                      steps: 252
                                                                                     1r: 0.0001
                                                                                                    evaluation reward: 1.58
episode: 435
                                                     epsilon: 1.0
               score: 2.0
                             memory length: 81617
                                                                      steps: 183
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.6
episode: 436
               score: 0.0
                             memory length: 81740
                                                     epsilon: 1.0
                                                                      steps: 123
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.6
episode: 437
                             memory length: 81911
                                                     epsilon: 1.0
                                                                      steps: 171
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.61
               score: 1.0
episode: 438
               score: 4.0
                             memory length: 82192
                                                     epsilon: 1.0
                                                                      steps: 281
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.62
episode: 439
               score: 2.0
                             memory length: 82409
                                                     epsilon: 1.0
                                                                      steps: 217
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.62
episode: 440
               score: 2.0
                             memory length: 82628
                                                     epsilon: 1.0
                                                                      steps: 219
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.63
episode: 441
               score: 1.0
                             memory length: 82797
                                                     epsilon: 1.0
                                                                      steps: 169
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.64
                             memory length: 82921
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.63
episode: 442
               score: 0.0
episode: 443
               score: 1.0
                             memory length: 83091
                                                     epsilon: 1.0
                                                                      steps: 170
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.64
episode: 444
               score: 2.0
                             memory length: 83272
                                                     epsilon: 1.0
                                                                      steps: 181
                                                                                     1r: 0.0001
                                                                                                    evaluation reward: 1.66
episode: 445
               score: 3.0
                             memory length: 83519
                                                     epsilon: 1.0
                                                                      steps: 247
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.68
episode: 446
               score: 1.0
                             memory length: 83670
                                                     epsilon: 1.0
                                                                      steps: 151
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.67
episode: 447
                             memory length: 83843
                                                     epsilon: 1.0
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.66
               score: 1.0
                                                                      steps: 173
episode: 448
               score: 0.0
                             memory length: 83967
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.65
                             memory length: 84119
episode: 449
               score: 1.0
                                                     epsilon: 1.0
                                                                      steps: 152
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.62
episode: 450
               score: 1.0
                             memory length: 84289
                                                     epsilon: 1.0
                                                                      steps: 170
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.63
episode: 451
                                                     epsilon: 1.0
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.64
               score: 2.0
                             memory length: 84488
                                                                      steps: 199
episode: 452
               score: 2.0
                             memory length: 84708
                                                     epsilon: 1.0
                                                                      steps: 220
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.64
episode: 453
               score: 3.0
                             memory length: 84974
                                                     epsilon: 1.0
                                                                      steps: 266
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.67
                             memory length: 85173
                                                     epsilon: 1.0
                                                                                     lr: 0.0001
episode: 454
               score: 2.0
                                                                      steps: 199
                                                                                                    evaluation reward: 1.67
episode: 455
               score: 1.0
                             memory length: 85343
                                                     epsilon: 1.0
                                                                      steps: 170
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.68
episode: 456
               score: 1.0
                             memory length: 85514
                                                     epsilon: 1.0
                                                                      steps: 171
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.69
episode: 457
               score: 0.0
                             memory length: 85637
                                                     epsilon: 1.0
                                                                      steps: 123
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.68
episode: 458
               score: 3.0
                             memory length: 85863
                                                     epsilon: 1.0
                                                                      steps: 226
                                                                                     1r: 0.0001
                                                                                                    evaluation reward: 1.69
episode: 459
               score: 0.0
                             memory length: 85987
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.67
episode: 460
               score: 1.0
                             memory length: 86157
                                                     epsilon: 1.0
                                                                      steps: 170
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.66
episode: 461
               score: 1.0
                             memory length: 86328
                                                     epsilon: 1.0
                                                                      steps: 171
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.67
episode: 462
               score: 0.0
                             memory length: 86451
                                                     epsilon: 1.0
                                                                      steps: 123
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.66
episode: 463
               score: 0.0
                             memory length: 86575
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.63
episode: 464
               score: 2.0
                             memory length: 86774
                                                     epsilon: 1.0
                                                                      steps: 199
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.62
episode: 465
               score: 1.0
                             memory length: 86926
                                                     epsilon: 1.0
                                                                      steps: 152
                                                                                     1r: 0.0001
                                                                                                    evaluation reward: 1.63
episode: 466
               score: 1.0
                             memory length: 87078
                                                     epsilon: 1.0
                                                                      steps: 152
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.6
episode: 467
               score: 1.0
                             memory length: 87251
                                                     epsilon: 1.0
                                                                      steps: 173
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.6
                                                     epsilon: 1.0
                                                                                     lr: 0.0001
episode: 468
               score: 2.0
                             memory length: 87455
                                                                      steps: 204
                                                                                                    evaluation reward: 1.6
episode: 469
               score: 3.0
                             memory length: 87724
                                                     epsilon: 1.0
                                                                      steps: 269
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.61
episode: 470
               score: 1.0
                             memory length: 87875
                                                     epsilon: 1.0
                                                                      steps: 151
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.6
episode: 471
                             memory length: 87999
                                                     epsilon: 1.0
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.56
               score: 0.0
                                                                      steps: 124
episode: 472
               score: 1.0
                             memory length: 88151
                                                     epsilon: 1.0
                                                                      steps: 152
                                                                                     1r: 0.0001
                                                                                                    evaluation reward: 1.57
episode: 473
                             memory length: 88399
                                                     epsilon: 1.0
                                                                      steps: 248
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.6
               score: 3.0
episode: 474
               score: 3.0
                             memory length: 88666
                                                     epsilon: 1.0
                                                                      steps: 267
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.61
episode: 475
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.59
               score: 1.0
                             memory length: 88836
                                                     epsilon: 1.0
                                                                      steps: 170
episode: 476
               score: 0.0
                             memory length: 88959
                                                     epsilon: 1.0
                                                                      steps: 123
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.59
episode: 477
               score: 0.0
                             memory length: 89083
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.54
episode: 478
               score: 2.0
                             memory length: 89282
                                                     epsilon: 1.0
                                                                      steps: 199
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.55
episode: 479
                                                     epsilon: 1.0
               score: 0.0
                             memory length: 89405
                                                                      steps: 123
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.5
episode: 480
               score: 0.0
                             memory length: 89529
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.48
episode: 481
               score: 2.0
                             memory length: 89733
                                                     epsilon: 1.0
                                                                      steps: 204
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.5
                                                                                     lr: 0.0001
episode: 482
               score: 5.0
                             memory length: 90061
                                                     epsilon: 1.0
                                                                      steps: 328
                                                                                                    evaluation reward: 1.54
episode: 483
               score: 0.0
                             memory length: 90185
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.54
episode: 484
               score: 0.0
                             memory length: 90309
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.52
episode: 485
                             memory length: 90606
                                                     epsilon: 1.0
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.53
               score: 4.0
                                                                      steps: 297
episode: 486
                                                     epsilon: 1.0
               score: 2.0
                             memory length: 90807
                                                                      steps: 201
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.53
episode: 487
               score: 1.0
                             memory length: 90978
                                                     epsilon: 1.0
                                                                      steps: 171
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.53
episode: 488
               score: 3.0
                             memory length: 91210
                                                     epsilon: 1.0
                                                                      steps: 232
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.54
episode: 489
               score: 1.0
                             memory length: 91361
                                                     epsilon: 1.0
                                                                      steps: 151
                                                                                     1r: 0.0001
                                                                                                    evaluation reward: 1.55
episode: 490
               score: 2.0
                             memory length: 91561
                                                     epsilon: 1.0
                                                                      steps: 200
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.57
episode: 491
               score: 2.0
                             memory length: 91762
                                                     epsilon: 1.0
                                                                      steps: 201
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.57
episode: 492
                             memory length: 91885
                                                                                     lr: 0.0001
               score: 0.0
                                                     epsilon: 1.0
                                                                      steps: 123
                                                                                                    evaluation reward: 1.5
episode: 493
               score: 1.0
                             memory length: 92057
                                                     epsilon: 1.0
                                                                      steps: 172
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.51
episode: 494
               score: 2.0
                             memory length: 92256
                                                     epsilon: 1.0
                                                                      steps: 199
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.48
episode: 495
               score: 4.0
                             memory length: 92551
                                                     epsilon: 1.0
                                                                      steps: 295
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.52
episode: 496
                                                     epsilon: 1.0
               score: 0.0
                             memory length: 92675
                                                                      steps: 124
                                                                                    1r: 0.0001
                                                                                                    evaluation reward: 1.52
episode: 497
               score: 1.0
                             memory length: 92847
                                                     epsilon: 1.0
                                                                      steps: 172
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.53
               score: 0.0
episode: 498
                             memory length: 92970
                                                     epsilon: 1.0
                                                                      steps: 123
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.51
episode: 499
               score: 2.0
                             memory length: 93190
                                                     epsilon: 1.0
                                                                      steps: 220
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.52
episode: 500
               score: 0.0
                             memory length: 93313
                                                     epsilon: 1.0
                                                                      steps: 123
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.5
episode: 501
               score: 1.0
                             memory length: 93465
                                                     epsilon: 1.0
                                                                      steps: 152
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.5
                                                                      steps: 152
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.48
episode: 502
               score: 1.0
                             memory length: 93617
                                                     epsilon: 1.0
episode: 503
               score: 1.0
                             memory length: 93788
                                                     epsilon: 1.0
                                                                      steps: 171
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.47
                             memory length: 94032
                                                                                     lr: 0.0001
episode: 504
               score: 3.0
                                                     epsilon: 1.0
                                                                      steps: 244
                                                                                                    evaluation reward: 1.49
               score: 2.0
episode: 505
                             memory length: 94213
                                                     epsilon: 1.0
                                                                      steps: 181
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.49
episode: 506
               score: 1.0
                             memory length: 94383
                                                     epsilon: 1.0
                                                                      steps: 170
                                                                                     1r: 0.0001
                                                                                                    evaluation reward: 1.49
episode: 507
               score: 1.0
                             memory length: 94535
                                                     epsilon: 1.0
                                                                      steps: 152
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.49
```

```
score: 3.0
                             memory length: 94762
                                                     epsilon: 1.0
                                                                      steps: 227
                                                                                    Ir: 0.0001
                                                                                                    evaluation reward: 1.5
episode: 508
                                                                      steps: 345
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.52
episode: 509
               score: 5.0
                             memory length: 95107
                                                     epsilon: 1.0
episode: 510
               score: 1.0
                             memory length: 95259
                                                     epsilon: 1.0
                                                                      steps: 152
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.5
                             memory length: 95383
                                                                      steps: 124
episode: 511
               score: 0.0
                                                     epsilon: 1.0
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.49
episode: 512
               score: 0.0
                             memory length: 95507
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.49
                                                     epsilon: 1.0
episode: 513
               score: 3.0
                             memory length: 95734
                                                                      steps: 227
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.48
episode: 514
               score: 0.0
                             memory length: 95858
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.47
episode: 515
               score: 1.0
                             memory length: 96028
                                                     epsilon: 1.0
                                                                      steps: 170
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.47
               score: 2.0
                                                                      steps: 219
episode: 516
                             memory length: 96247
                                                     epsilon: 1.0
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.46
episode: 517
               score: 3.0
                             memory length: 96495
                                                     epsilon: 1.0
                                                                      steps: 248
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.49
episode: 518
               score: 3.0
                             memory length: 96745
                                                     epsilon: 1.0
                                                                      steps: 250
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.52
episode: 519
               score: 1.0
                             memory length: 96915
                                                     epsilon: 1.0
                                                                      steps: 170
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.5
episode: 520
               score: 1.0
                             memory length: 97067
                                                     epsilon: 1.0
                                                                      steps: 152
                                                                                    1r: 0.0001
                                                                                                    evaluation reward: 1.47
episode: 521
               score: 0.0
                             memory length: 97191
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.46
episode: 522
               score: 1.0
                             memory length: 97361
                                                     epsilon: 1.0
                                                                      steps: 170
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.44
episode: 523
                                                                      steps: 276
               score: 4.0
                             memory length: 97637
                                                     epsilon: 1.0
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.45
episode: 524
               score: 0.0
                             memory length: 97761
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.44
episode: 525
               score: 3.0
                             memory length: 97988
                                                     epsilon: 1.0
                                                                      steps: 227
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.44
                             memory length: 98206
                                                                                                    evaluation reward: 1.46
episode: 526
               score: 2.0
                                                     epsilon: 1.0
                                                                      steps: 218
                                                                                    lr: 0.0001
episode: 527
               score: 2.0
                             memory length: 98424
                                                     epsilon: 1.0
                                                                      steps: 218
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.47
               score: 3.0
                             memory length: 98656
                                                     epsilon: 1.0
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.5
episode: 528
                                                                      steps: 232
episode: 529
               score: 0.0
                             memory length: 98780
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.5
episode: 530
               score: 0.0
                             memory length: 98903
                                                     epsilon: 1.0
                                                                      steps: 123
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.46
episode: 531
               score: 1.0
                             memory length: 99073
                                                     epsilon: 1.0
                                                                      steps: 170
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.47
episode: 532
               score: 3.0
                             memory length: 99341
                                                     epsilon: 1.0
                                                                      steps: 268
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.49
episode: 533
               score: 2.0
                             memory length: 99560
                                                     epsilon: 1.0
                                                                      steps: 219
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.48
episode: 534
               score: 1.0
                             memory length: 99711
                                                     epsilon: 1.0
                                                                      steps: 151
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.46
episode: 535
               score: 2.0
                             memory length: 99891
                                                     epsilon: 1.0
                                                                      steps: 180
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.46
/content/gdrive/.shortcut-targets-by-id/1CyoDj2SP pATjHElVctJ3S5 2D-1 IHK/assignment5 materials/agent.py:61: VisibleDeprecation
  mini batch = np.array(mini batch).transpose()
```

/content/gdrive/.shortcut-targets-by-id/1CyoDj2SP\_pATjHElVctJ3S5\_2D-1\_IHK/assignment5\_materials/agent.py:102: UserWarning: ir next\_states\_value[mask] = self.policy\_net(next\_states[mask]).max(1)[0].detach()

/content/gdrive/.shortcut-targets-by-id/1CyoDj2SP\_pATjHElVctJ3S5\_2D-1\_IHK/assignment5\_materials/agent.py:61: FutureWarning: 1 mini batch = np.array(mini batch).transpose()

```
memory length: 100221
                                                      epsilon: 0.9995604400000095
episode: 536
               score: 5.0
                                                                                       steps: 330
                                                                                                     lr: 0.0001
                                                                                                                     evaluation re
episode: 537
               score: 1.0
                             memory length: 100392
                                                      epsilon: 0.9992218600000169
                                                                                                     lr: 0.0001
                                                                                       steps: 171
                                                                                                                     evaluation re
episode: 538
                                                      epsilon: 0.9989783200000222
               score: 0.0
                             memory length: 100515
                                                                                       steps: 123
                                                                                                     1r: 0.0001
                                                                                                                     evaluation re
episode: 539
               score: 3.0
                             memory length: 100760
                                                      epsilon: 0.9984932200000327
                                                                                       steps: 245
                                                                                                     lr: 0.0001
                                                                                                                     evaluation re
episode: 540
               score: 2.0
                             memory length: 100941
                                                      epsilon: 0.9981348400000405
                                                                                       steps: 181
                                                                                                     lr: 0.0001
                                                                                                                     evaluation re
episode: 541
               score: 1.0
                             memory length: 101110
                                                      epsilon: 0.9978002200000478
                                                                                                     lr: 0.0001
                                                                                       steps: 169
                                                                                                                     evaluation re
                                                      epsilon: 0.9973111600000584
episode: 542
               score: 3.0
                             memory length: 101357
                                                                                       steps: 247
                                                                                                     lr: 0.0001
                                                                                                                     evaluation re
episode: 543
               score: 2.0
                             memory length: 101555
                                                      epsilon: 0.9969191200000669
                                                                                       steps: 198
                                                                                                     lr: 0.0001
                                                                                                                     evaluation re
episode: 544
               score: 3.0
                             memory length: 101784
                                                      epsilon: 0.9964657000000767
                                                                                       steps: 229
                                                                                                     lr: 0.0001
                                                                                                                     evaluation re
episode: 545
               score: 0.0
                             memory length: 101907
                                                      epsilon: 0.996222160000082
                                                                                     steps: 123
                                                                                                    lr: 0.0001
                                                                                                                    evaluation rev
episode: 546
               score: 1.0
                             memory length: 102058
                                                      epsilon: 0.9959231800000885
                                                                                       steps: 151
                                                                                                     lr: 0.0001
                                                                                                                     evaluation re
                                                      epsilon: 0.9953687800001005
episode: 547
               score: 4.0
                             memory length: 102338
                                                                                       steps: 280
                                                                                                     lr: 0.0001
                                                                                                                     evaluation re
                             memory length: 102489
episode: 548
                                                      epsilon: 0.995069800000107
                                                                                     steps: 151
                                                                                                    lr: 0.0001
                                                                                                                    evaluation rev
               score: 1.0
episode: 549
               score: 2.0
                             memory length: 102708
                                                      epsilon: 0.9946361800001164
                                                                                       steps: 219
                                                                                                     lr: 0.0001
                                                                                                                     evaluation re
episode: 550
               score: 2.0
                             memory length: 102890
                                                      epsilon: 0.9942758200001243
                                                                                       steps: 182
                                                                                                     lr: 0.0001
                                                                                                                     evaluation re
episode: 551
               score: 0.0
                             memory length: 103014
                                                      epsilon: 0.9940303000001296
                                                                                       steps: 124
                                                                                                     lr: 0.0001
                                                                                                                     evaluation re
episode: 552
               score: 2.0
                             memory length: 103213
                                                      epsilon: 0.9936362800001382
                                                                                       steps: 199
                                                                                                     1r: 0.0001
                                                                                                                     evaluation re
episode: 553
               score: 2.0
                             memory length: 103433
                                                      epsilon: 0.9932006800001476
                                                                                       steps: 220
                                                                                                     lr: 0.0001
                                                                                                                     evaluation re
episode: 554
               score: 0.0
                             memory length: 103557
                                                      epsilon: 0.9929551600001529
                                                                                       steps: 124
                                                                                                     lr: 0.0001
                                                                                                                     evaluation re
episode: 555
               score: 1.0
                             memory length: 103728
                                                      epsilon: 0.9926165800001603
                                                                                       steps: 171
                                                                                                     1r: 0.0001
                                                                                                                     evaluation re
episode: 556
                                                                                                                     evaluation re
               score: 2.0
                             memory length: 103945
                                                      epsilon: 0.9921869200001696
                                                                                       steps: 217
                                                                                                     lr: 0.0001
episode: 557
               score: 3.0
                             memory length: 104191
                                                      epsilon: 0.9916998400001802
                                                                                       steps: 246
                                                                                                     lr: 0.0001
                                                                                                                     evaluation re
episode: 558
               score: 1.0
                             memory length: 104360
                                                      epsilon: 0.9913652200001875
                                                                                                     lr: 0.0001
                                                                                       steps: 169
                                                                                                                     evaluation re
episode: 559
               score: 0.0
                             memory length: 104483
                                                      epsilon: 0.9911216800001927
                                                                                       steps: 123
                                                                                                     1r: 0.0001
                                                                                                                     evaluation re
episode: 560
               score: 5.0
                             memory length: 104813
                                                      epsilon: 0.9904682800002069
                                                                                       steps: 330
                                                                                                     lr: 0.0001
                                                                                                                     evaluation re
episode: 561
               score: 3.0
                             memory length: 105062
                                                      epsilon: 0.9899752600002176
                                                                                       steps: 249
                                                                                                     lr: 0.0001
                                                                                                                     evaluation re
                                                                                                     lr: 0.0001
episode: 562
               score: 3.0
                             memory length: 105289
                                                      epsilon: 0.9895258000002274
                                                                                       steps: 227
                                                                                                                     evaluation re
episode: 563
               score: 2.0
                             memory length: 105490
                                                      epsilon: 0.989127820000236
                                                                                     steps: 201
                                                                                                    lr: 0.0001
                                                                                                                    evaluation rev
episode: 564
               score: 0.0
                             memory length: 105614
                                                      epsilon: 0.9888823000002414
                                                                                       steps: 124
                                                                                                     lr: 0.0001
                                                                                                                     evaluation re
episode: 565
               score: 2.0
                             memory length: 105832
                                                      epsilon: 0.9884506600002507
                                                                                       steps: 218
                                                                                                     lr: 0.0001
                                                                                                                     evaluation re
episode: 566
               score: 1.0
                             memory length: 106002
                                                      epsilon: 0.988114060000258
                                                                                     steps: 170
                                                                                                    lr: 0.0001
                                                                                                                    evaluation rev
episode: 567
               score: 2.0
                             memory length: 106201
                                                      epsilon: 0.9877200400002666
                                                                                       steps: 199
                                                                                                     lr: 0.0001
                                                                                                                     evaluation re
               score: 0.0
episode: 568
                             memory length: 106324
                                                      epsilon: 0.9874765000002719
                                                                                       steps: 123
                                                                                                     lr: 0.0001
                                                                                                                     evaluation re
episode: 569
                                                      epsilon: 0.9871379200002792
               score: 1.0
                             memory length: 106495
                                                                                       steps: 171
                                                                                                     1r: 0.0001
                                                                                                                     evaluation re
episode: 570
               score: 2.0
                             memory length: 106694
                                                      epsilon: 0.9867439000002878
                                                                                       steps: 199
                                                                                                     lr: 0.0001
                                                                                                                     evaluation re
episode: 571
               score: 4.0
                             memory length: 106991
                                                      epsilon: 0.9861558400003005
                                                                                       steps: 297
                                                                                                     lr: 0.0001
                                                                                                                     evaluation re
episode: 572
                             memory length: 107239
                                                      epsilon: 0.9856648000003112
                                                                                                     lr: 0.0001
               score: 3.0
                                                                                       steps: 248
                                                                                                                     evaluation re
                                                      epsilon: 0.9854192800003165
episode: 573
               score: 0.0
                             memory length: 107363
                                                                                       steps: 124
                                                                                                     lr: 0.0001
                                                                                                                     evaluation re
episode: 574
               score: 3.0
                             memory length: 107611
                                                      epsilon: 0.9849282400003272
                                                                                       steps: 248
                                                                                                     lr: 0.0001
                                                                                                                     evaluation re
                             memory length: 107860
episode: 575
               score: 3.0
                                                      epsilon: 0.9844352200003379
                                                                                       steps: 249
                                                                                                     lr: 0.0001
                                                                                                                     evaluation re
episode: 576
               score: 1.0
                             memory length: 108012
                                                      epsilon: 0.9841342600003444
                                                                                       steps: 152
                                                                                                     1r: 0.0001
                                                                                                                     evaluation re
                                                                                                    lr: 0.0001
episode: 577
               score: 2.0
                             memory length: 108211
                                                      epsilon: 0.983740240000353
                                                                                      steps: 199
                                                                                                                    evaluation rev
episode: 578
               score: 2.0
                             memory length: 108429
                                                      epsilon: 0.9833086000003624
                                                                                       steps: 218
                                                                                                     lr: 0.0001
                                                                                                                     evaluation re
                             memory length: 108580
episode: 579
                                                      epsilon: 0.9830096200003688
                                                                                                     lr: 0.0001
                                                                                                                     evaluation re
               score: 1.0
                                                                                       steps: 151
               score: 2.0
                                                      epsilon: 0.9825740200003783
episode: 580
                             memory length: 108800
                                                                                       steps: 220
                                                                                                     lr: 0.0001
                                                                                                                     evaluation re
episode: 581
               score: 2.0
                             memory length: 109020
                                                      epsilon: 0.9821384200003878
                                                                                       steps: 220
                                                                                                     lr: 0.0001
                                                                                                                     evaluation re
episode: 582
               score: 1.0
                             memory length: 109189
                                                      epsilon: 0.981803800000395
                                                                                     steps: 169
                                                                                                    lr: 0.0001
                                                                                                                    evaluation rev
episode: 583
               score: 1.0
                             memory length: 109360
                                                      epsilon: 0.9814652200004024
                                                                                       steps: 171
                                                                                                     lr: 0.0001
                                                                                                                     evaluation re
episode: 584
               score: 3.0
                             memory length: 109632
                                                      epsilon: 0.9809266600004141
                                                                                       steps: 272
                                                                                                     lr: 0.0001
                                                                                                                     evaluation re
               score: 0.0
                                                                                       steps: 124
episode: 585
                             memory length: 109756
                                                      epsilon: 0.9806811400004194
                                                                                                     lr: 0.0001
                                                                                                                     evaluation re
episode: 586
               score: 0.0
                             memory length: 109880
                                                      epsilon: 0.9804356200004247
                                                                                       steps: 124
                                                                                                     lr: 0.0001
                                                                                                                     evaluation re
```

```
episode: 587
                                                      epsilon: 0.980099020000432
               score: 1.0
                             memory length: 110050
                                                                                      steps: 170
                                                                                                     lr: 0.0001
                                                                                                                     evaluation rev
episode: 588
               score: 0.0
                             memory length: 110174
                                                      epsilon: 0.9798535000004374
                                                                                       steps: 124
                                                                                                     lr: 0.0001
                                                                                                                     evaluation re
episode: 589
               score: 3.0
                             memory length: 110383
                                                      epsilon: 0.9794396800004463
                                                                                                      lr: 0.0001
                                                                                       steps: 209
                                                                                                                     evaluation re
episode: 590
               score: 2.0
                             memory length: 110582
                                                      epsilon: 0.9790456600004549
                                                                                       steps: 199
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
                             memory length: 110733
                                                      epsilon: 0.9787466800004614
                                                                                                      lr: 0.0001
episode: 591
               score: 1.0
                                                                                       steps: 151
                                                                                                                     evaluation re
episode: 592
               score: 2.0
                             memory length: 110931
                                                      epsilon: 0.9783546400004699
                                                                                       steps: 198
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
episode: 593
               score: 0.0
                                                                                                      lr: 0.0001
                             memory length: 111055
                                                      epsilon: 0.9781091200004752
                                                                                       steps: 124
                                                                                                                     evaluation re
episode: 594
               score: 3.0
                             memory length: 111321
                                                      epsilon: 0.9775824400004867
                                                                                       steps: 266
                                                                                                     lr: 0.0001
                                                                                                                     evaluation re
episode: 595
               score: 0.0
                             memory length: 111445
                                                      epsilon: 0.977336920000492
                                                                                      steps: 124
                                                                                                     lr: 0.0001
                                                                                                                     evaluation rev
               score: 0.0
                                                      epsilon: 0.9770933800004973
episode: 596
                             memory length: 111568
                                                                                       steps: 123
                                                                                                     lr: 0.0001
                                                                                                                     evaluation re
episode: 597
               score: 0.0
                             memory length: 111692
                                                      epsilon: 0.9768478600005026
                                                                                       steps: 124
                                                                                                     lr: 0.0001
                                                                                                                     evaluation re
episode: 598
               score: 0.0
                             memory length: 111815
                                                      epsilon: 0.9766043200005079
                                                                                       steps: 123
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
episode: 599
               score: 3.0
                             memory length: 112062
                                                      epsilon: 0.9761152600005185
                                                                                                     lr: 0.0001
                                                                                       steps: 247
                                                                                                                     evaluation re
                             memory length: 112231
episode: 600
                                                                                                     1r: 0.0001
               score: 1.0
                                                      epsilon: 0.9757806400005258
                                                                                       steps: 169
                                                                                                                     evaluation re
episode: 601
               score: 4.0
                             memory length: 112529
                                                      epsilon: 0.9751906000005386
                                                                                       steps: 298
                                                                                                     1r: 0.0001
                                                                                                                     evaluation re
episode: 602
               score: 1.0
                             memory length: 112680
                                                      epsilon: 0.9748916200005451
                                                                                       steps: 151
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
episode: 603
               score: 2.0
                             memory length: 112880
                                                      epsilon: 0.9744956200005537
                                                                                       steps: 200
                                                                                                     lr: 0.0001
                                                                                                                     evaluation re
episode: 604
               score: 1.0
                             memory length: 113050
                                                      epsilon: 0.974159020000561
                                                                                      steps: 170
                                                                                                     lr: 0.0001
                                                                                                                     evaluation rev
episode: 605
               score: 2.0
                             memory length: 113249
                                                      epsilon: 0.9737650000005695
                                                                                       steps: 199
                                                                                                     lr: 0.0001
                                                                                                                     evaluation re
episode: 606
               score: 1.0
                             memory length: 113419
                                                      epsilon: 0.9734284000005768
                                                                                       steps: 170
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
episode: 607
               score: 3.0
                             memory length: 113687
                                                      epsilon: 0.9728977600005884
                                                                                       steps: 268
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
                             memory length: 113839
                                                      epsilon: 0.9725968000005949
                                                                                                      lr: 0.0001
episode: 608
               score: 1.0
                                                                                       steps: 152
                                                                                                                     evaluation re
episode: 609
               score: 1.0
                             memory length: 114009
                                                      epsilon: 0.9722602000006022
                                                                                       steps: 170
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
               score: 1.0
                             memory length: 114179
                                                      epsilon: 0.9719236000006095
                                                                                                     lr: 0.0001
episode: 610
                                                                                       steps: 170
                                                                                                                     evaluation re
               score: 3.0
episode: 611
                             memory length: 114413
                                                      epsilon: 0.9714602800006196
                                                                                       steps: 234
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
episode: 612
               score: 0.0
                             memory length: 114537
                                                      epsilon: 0.9712147600006249
                                                                                       steps: 124
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
               score: 0.0
episode: 613
                             memory length: 114660
                                                      epsilon: 0.9709712200006302
                                                                                       steps: 123
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
episode: 614
               score: 2.0
                             memory length: 114859
                                                      epsilon: 0.9705772000006387
                                                                                       steps: 199
                                                                                                     lr: 0.0001
                                                                                                                     evaluation re
               score: 0.0
                             memory length: 114982
                                                      epsilon: 0.970333660000644
                                                                                                     lr: 0.0001
episode: 615
                                                                                      steps: 123
                                                                                                                     evaluation rev
episode: 616
               score: 1.0
                             memory length: 115151
                                                      epsilon: 0.9699990400006513
                                                                                       steps: 169
                                                                                                     lr: 0.0001
                                                                                                                     evaluation re
                             memory length: 115275
                                                      epsilon: 0.9697535200006566
                                                                                                     lr: 0.0001
episode: 617
               score: 0.0
                                                                                       steps: 124
                                                                                                                     evaluation re
                                                      epsilon: 0.969323860000666
episode: 618
               score: 2.0
                             memory length: 115492
                                                                                      steps: 217
                                                                                                     lr: 0.0001
                                                                                                                     evaluation rev
episode: 619
               score: 1.0
                             memory length: 115644
                                                      epsilon: 0.9690229000006725
                                                                                       steps: 152
                                                                                                     lr: 0.0001
                                                                                                                     evaluation re
                             memory length: 115768
episode: 620
               score: 0.0
                                                      epsilon: 0.9687773800006778
                                                                                       steps: 124
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
episode: 621
               score: 2.0
                             memory length: 115967
                                                      epsilon: 0.9683833600006864
                                                                                       steps: 199
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
               score: 0.0
                             memory length: 116091
                                                      epsilon: 0.9681378400006917
                                                                                                      lr: 0.0001
episode: 622
                                                                                       steps: 124
                                                                                                                     evaluation re
episode: 623
               score: 1.0
                             memory length: 116243
                                                      epsilon: 0.9678368800006982
                                                                                       steps: 152
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
                             memory length: 116394
                                                      epsilon: 0.9675379000007047
                                                                                                     lr: 0.0001
episode: 624
               score: 1.0
                                                                                       steps: 151
                                                                                                                     evaluation re
episode: 625
               score: 0.0
                             memory length: 116518
                                                      epsilon: 0.96729238000071
                                                                                     steps: 124
                                                                                                    lr: 0.0001
                                                                                                                   evaluation rewa
episode: 626
               score: 0.0
                             memory length: 116642
                                                      epsilon: 0.9670468600007154
                                                                                       steps: 124
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
episode: 627
               score: 0.0
                             memory length: 116765
                                                      epsilon: 0.9668033200007207
                                                                                       steps: 123
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
episode: 628
               score: 1.0
                             memory length: 116934
                                                      epsilon: 0.9664687000007279
                                                                                       steps: 169
                                                                                                     lr: 0.0001
                                                                                                                     evaluation re
episode: 629
               score: 2.0
                             memory length: 117153
                                                      epsilon: 0.9660350800007373
                                                                                       steps: 219
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
                                                                                                     lr: 0.0001
episode: 630
               score: 2.0
                             memory length: 117352
                                                      epsilon: 0.9656410600007459
                                                                                       steps: 199
                                                                                                                     evaluation re
episode: 631
               score: 0.0
                             memory length: 117476
                                                      epsilon: 0.9653955400007512
                                                                                       steps: 124
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
episode: 632
               score: 2.0
                             memory length: 117674
                                                      epsilon: 0.9650035000007597
                                                                                       steps: 198
                                                                                                     lr: 0.0001
                                                                                                                     evaluation re
episode: 633
               score: 0.0
                             memory length: 117797
                                                      epsilon: 0.964759960000765
                                                                                      steps: 123
                                                                                                     lr: 0.0001
                                                                                                                     evaluation rev
episode: 634
                                                                                                     lr: 0.0001
               score: 3.0
                             memory length: 118066
                                                      epsilon: 0.9642273400007766
                                                                                       steps: 269
                                                                                                                     evaluation re
episode: 635
               score: 1.0
                             memory length: 118237
                                                      epsilon: 0.9638887600007839
                                                                                       steps: 171
                                                                                                     lr: 0.0001
                                                                                                                     evaluation re
episode: 636
               score: 2.0
                             memory length: 118436
                                                      epsilon: 0.9634947400007925
                                                                                       steps: 199
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
               score: 3.0
                             memory length: 118684
                                                      epsilon: 0.9630037000008032
                                                                                                      lr: 0.0001
episode: 637
                                                                                       steps: 248
                                                                                                                     evaluation re
               score: 2.0
episode: 638
                             memory length: 118902
                                                      epsilon: 0.9625720600008125
                                                                                       steps: 218
                                                                                                     1r: 0.0001
                                                                                                                     evaluation re
episode: 639
               score: 3.0
                             memory length: 119130
                                                      epsilon: 0.9621206200008223
                                                                                       steps: 228
                                                                                                     lr: 0.0001
                                                                                                                     evaluation re
episode: 640
               score: 4.0
                             memory length: 119444
                                                      epsilon: 0.9614989000008358
                                                                                       steps: 314
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
                                                                                                      1r: 0.0001
episode: 641
               score: 0.0
                             memory length: 119568
                                                      ensilon: 0.9612533800008412
                                                                                       steps: 124
                                                                                                                     evaluation re
episode: 642
               score: 1.0
                             memory length: 119737
                                                      epsilon: 0.9609187600008484
                                                                                       steps: 169
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
episode: 643
               score: 2.0
                             memory length: 119955
                                                      epsilon: 0.9604871200008578
                                                                                       steps: 218
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
               score: 3.0
                             memory length: 120221
                                                      epsilon: 0.9599604400008692
                                                                                       steps: 266
                                                                                                     lr: 0.0001
episode: 644
                                                                                                                     evaluation re
episode: 645
               score: 0.0
                             memory length: 120345
                                                      epsilon: 0.9597149200008745
                                                                                       steps: 124
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
                                                      epsilon: 0.9593763400008819
                                                                                                      lr: 0.0001
episode: 646
               score: 1.0
                             memory length: 120516
                                                                                       steps: 171
                                                                                                                     evaluation re
episode: 647
               score: 1.0
                             memory length: 120668
                                                      epsilon: 0.9590753800008884
                                                                                       steps: 152
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
                             memory length: 120791
episode: 648
               score: 0.0
                                                      epsilon: 0.9588318400008937
                                                                                       steps: 123
                                                                                                     lr: 0.0001
                                                                                                                     evaluation re
                                                      epsilon: 0.958588300000899
episode: 649
               score: 0.0
                             memory length: 120914
                                                                                      steps: 123
                                                                                                     lr: 0.0001
                                                                                                                     evaluation rev
episode: 650
               score: 0.0
                             memory length: 121037
                                                      epsilon: 0.9583447600009043
                                                                                       steps: 123
                                                                                                     lr: 0.0001
                                                                                                                     evaluation re
episode: 651
               score: 0.0
                             memory length: 121161
                                                      epsilon: 0.9580992400009096
                                                                                                      lr: 0.0001
                                                                                       steps: 124
                                                                                                                     evaluation re
episode: 652
               score: 1.0
                             memory length: 121334
                                                      epsilon: 0.9577567000009171
                                                                                       steps: 173
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
                             memory length: 121533
                                                      epsilon: 0.9573626800009256
                                                                                                     lr: 0.0001
episode: 653
               score: 2.0
                                                                                       steps: 199
                                                                                                                     evaluation re
               score: 1.0
episode: 654
                             memory length: 121705
                                                      epsilon: 0.957022120000933
                                                                                      steps: 172
                                                                                                     lr: 0.0001
                                                                                                                     evaluation rev
episode: 655
                                                      epsilon: 0.9567191800009396
               score: 1.0
                             memory length: 121858
                                                                                       steps: 153
                                                                                                     1r: 0.0001
                                                                                                                     evaluation re
               score: 2.0
                                                                                                     lr: 0.0001
episode: 656
                             memory length: 122078
                                                      epsilon: 0.956283580000949
                                                                                      steps: 220
                                                                                                                     evaluation rev
episode: 657
               score: 0.0
                             memory length: 122202
                                                      epsilon: 0.9560380600009544
                                                                                       steps: 124
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
episode: 658
               score: 1.0
                             memory length: 122375
                                                      epsilon: 0.9556955200009618
                                                                                       steps: 173
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
episode: 659
               score: 0.0
                             memory length: 122499
                                                      epsilon: 0.9554500000009671
                                                                                       steps: 124
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
episode: 660
               score: 2.0
                             memory length: 122719
                                                      epsilon: 0.9550144000009766
                                                                                       steps: 220
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
episode: 661
               score: 0.0
                             memory length: 122842
                                                      epsilon: 0.9547708600009819
                                                                                       steps: 123
                                                                                                     lr: 0.0001
                                                                                                                     evaluation re
episode: 662
               score: 2.0
                             memory length: 123061
                                                      epsilon: 0.9543372400009913
                                                                                       steps: 219
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
episode: 663
               score: 1.0
                             memory length: 123232
                                                      epsilon: 0.9539986600009986
                                                                                       steps: 171
                                                                                                      1r: 0.0001
                                                                                                                     evaluation re
episode: 664
               score: 2.0
                             memory length: 123431
                                                      epsilon: 0.9536046400010072
                                                                                       steps: 199
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
episode: 665
               score: 0.0
                             memory length: 123555
                                                      epsilon: 0.9533591200010125
                                                                                       steps: 124
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
               score: 1.0
                                                      epsilon: 0.9530581600010191
episode: 666
                             memory length: 123707
                                                                                       steps: 152
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
episode: 667
               score: 4.0
                             memory length: 124004
                                                      epsilon: 0.9524701000010318
                                                                                       steps: 297
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
               score: 2.0
                                                      epsilon: 0.9520760800010404
                                                                                       steps: 199
                                                                                                      lr: 0.0001
episode: 668
                             memory length: 124203
                                                                                                                     evaluation re
episode: 669
               score: 5.0
                             memory length: 124547
                                                      epsilon: 0.9513949600010552
                                                                                       steps: 344
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
               score: 0.0
                                                      epsilon: 0.9511514200010605
                                                                                                      lr: 0.0001
episode: 670
                             memory length: 124670
                                                                                       steps: 123
                                                                                                                     evaluation re
               score: 3.0
                             memory length: 124918
                                                      epsilon: 0.9506603800010711
                                                                                       steps: 248
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
episode: 671
```

```
episode: 672
                             memory length: 125166
                                                      epsilon: 0.9501693400010818
                                                                                       steps: 248
                                                                                                     lr: 0.0001
                                                                                                                     evaluation re
               score: 3.0
                                                      epsilon: 0.9499258000010871
episode: 673
               score: 0.0
                             memory length: 125289
                                                                                       steps: 123
                                                                                                     lr: 0.0001
                                                                                                                     evaluation re
                             memory length: 125489
episode: 674
               score: 2.0
                                                      epsilon: 0.9495298000010957
                                                                                       steps: 200
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
episode: 675
               score: 0.0
                             memory length: 125613
                                                      epsilon: 0.949284280001101
                                                                                      steps: 124
                                                                                                    lr: 0.0001
                                                                                                                    evaluation rev
                                                                                                     lr: 0.0001
episode: 676
               score: 1.0
                             memory length: 125764
                                                      epsilon: 0.9489853000011075
                                                                                       steps: 151
                                                                                                                     evaluation re
episode: 677
               score: 2.0
                             memory length: 125965
                                                      epsilon: 0.9485873200011161
                                                                                       steps: 201
                                                                                                     lr: 0.0001
                                                                                                                     evaluation re
episode: 678
               score: 1.0
                             memory length: 126117
                                                      epsilon: 0.9482863600011227
                                                                                       steps: 152
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
               score: 2.0
episode: 679
                             memory length: 126315
                                                      epsilon: 0.9478943200011312
                                                                                                     lr: 0.0001
                                                                                       steps: 198
                                                                                                                     evaluation re
               score: 4.0
                             memory length: 126613
                                                      epsilon: 0.947304280001144
                                                                                                    lr: 0.0001
episode: 680
                                                                                      steps: 298
                                                                                                                    evaluation rev
episode: 681
               score: 2.0
                             memory length: 126812
                                                      epsilon: 0.9469102600011525
                                                                                       steps: 199
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
episode: 682
               score: 1.0
                             memory length: 126964
                                                      epsilon: 0.9466093000011591
                                                                                       steps: 152
                                                                                                     lr: 0.0001
                                                                                                                     evaluation re
episode: 683
               score: 2.0
                             memory length: 127163
                                                      epsilon: 0.9462152800011676
                                                                                       steps: 199
                                                                                                     1r: 0.0001
                                                                                                                     evaluation re
                             memory length: 127410
                                                      epsilon: 0.9457262200011782
                                                                                                      lr: 0.0001
episode: 684
               score: 3.0
                                                                                       steps: 247
                                                                                                                     evaluation re
episode: 685
               score: 5.0
                             memory length: 127709
                                                      epsilon: 0.9451342000011911
                                                                                       steps: 299
                                                                                                     lr: 0.0001
                                                                                                                     evaluation re
                             memory length: 127833
episode: 686
                                                      epsilon: 0.9448886800011964
                                                                                                      1r: 0.0001
                                                                                                                     evaluation re
               score: 0.0
                                                                                       steps: 124
                             memory length: 127956
episode: 687
               score: 0.0
                                                      epsilon: 0.9446451400012017
                                                                                       steps: 123
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
episode: 688
               score: 5.0
                             memory length: 128284
                                                      epsilon: 0.9439957000012158
                                                                                       steps: 328
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
                             memory length: 128454
                                                      epsilon: 0.9436591000012231
                                                                                                      lr: 0.0001
episode: 689
               score: 1.0
                                                                                       steps: 170
                                                                                                                     evaluation re
                                                      epsilon: 0.9432195400012326
episode: 690
               score: 2.0
                             memory length: 128676
                                                                                       steps: 222
                                                                                                     1r: 0.0001
                                                                                                                     evaluation re
                                                      epsilon: 0.94288096000124
episode: 691
               score: 1.0
                             memory length: 128847
                                                                                     steps: 171
                                                                                                    lr: 0.0001
                                                                                                                   evaluation rewa
episode: 692
               score: 1.0
                             memory length: 129017
                                                      epsilon: 0.9425443600012473
                                                                                       steps: 170
                                                                                                     lr: 0.0001
                                                                                                                     evaluation re
                             memory length: 129187
               score: 1.0
                                                      epsilon: 0.9422077600012546
                                                                                                      lr: 0.0001
episode: 693
                                                                                       steps: 170
                                                                                                                     evaluation re
episode: 694
               score: 2.0
                             memory length: 129386
                                                      epsilon: 0.9418137400012632
                                                                                       steps: 199
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
episode: 695
               score: 2.0
                             memory length: 129584
                                                      epsilon: 0.9414217000012717
                                                                                       steps: 198
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
episode: 696
               score: 0.0
                             memory length: 129708
                                                      epsilon: 0.941176180001277
                                                                                      steps: 124
                                                                                                    lr: 0.0001
                                                                                                                    evaluation rev
episode: 697
               score: 1.0
                             memory length: 129860
                                                      epsilon: 0.9408752200012835
                                                                                       steps: 152
                                                                                                     lr: 0.0001
                                                                                                                     evaluation re
episode: 698
               score: 0.0
                             memory length: 129984
                                                      epsilon: 0.9406297000012889
                                                                                       steps: 124
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
               score: 2.0
                             memory length: 130170
                                                      epsilon: 0.9402614200012969
                                                                                                     lr: 0.0001
episode: 699
                                                                                       steps: 186
                                                                                                                     evaluation re
episode: 700
               score: 3.0
                             memory length: 130436
                                                      epsilon: 0.9397347400013083
                                                                                       steps: 266
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
               score: 0.0
                             memory length: 130560
                                                      epsilon: 0.9394892200013136
                                                                                       steps: 124
                                                                                                      lr: 0.0001
episode: 701
                                                                                                                     evaluation re
episode: 702
               score: 2.0
                             memory length: 130758
                                                      epsilon: 0.9390971800013221
                                                                                       steps: 198
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
episode: 703
                             memory length: 130958
                                                      epsilon: 0.9387011800013307
                                                                                                      lr: 0.0001
               score: 2.0
                                                                                       steps: 200
                                                                                                                     evaluation re
                             memory length: 131109
episode: 704
               score: 1.0
                                                      epsilon: 0.9384022000013372
                                                                                       steps: 151
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
episode: 705
               score: 1.0
                             memory length: 131261
                                                      epsilon: 0.9381012400013438
                                                                                       steps: 152
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
episode: 706
                             memory length: 131433
                                                      epsilon: 0.9377606800013512
                                                                                                      lr: 0.0001
               score: 1.0
                                                                                       steps: 172
                                                                                                                     evaluation re
episode: 707
               score: 0.0
                             memory length: 131557
                                                      epsilon: 0.9375151600013565
                                                                                       steps: 124
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
episode: 708
               score: 2.0
                             memory length: 131740
                                                      epsilon: 0.9371528200013644
                                                                                                      lr: 0.0001
                                                                                       steps: 183
                                                                                                                     evaluation re
episode: 709
               score: 3.0
                             memory length: 131985
                                                      epsilon: 0.9366677200013749
                                                                                       steps: 245
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
episode: 710
               score: 2.0
                             memory length: 132204
                                                      epsilon: 0.9362341000013843
                                                                                       steps: 219
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
                                                      epsilon: 0.9358975000013916
                                                                                                                     evaluation re
episode: 711
               score: 1.0
                             memory length: 132374
                                                                                       steps: 170
                                                                                                      lr: 0.0001
episode: 712
               score: 0.0
                             memory length: 132498
                                                      epsilon: 0.9356519800013969
                                                                                       steps: 124
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
episode: 713
               score: 1.0
                             memory length: 132667
                                                      epsilon: 0.9353173600014042
                                                                                       steps: 169
                                                                                                     lr: 0.0001
                                                                                                                     evaluation re
episode: 714
               score: 2.0
                             memory length: 132888
                                                      epsilon: 0.9348797800014137
                                                                                       steps: 221
                                                                                                     1r: 0.0001
                                                                                                                     evaluation re
episode: 715
               score: 0.0
                             memory length: 133012
                                                      epsilon: 0.934634260001419
                                                                                                    lr: 0.0001
                                                                                      steps: 124
                                                                                                                    evaluation rev
                                                                                       steps: 247
episode: 716
               score: 3.0
                             memory length: 133259
                                                      epsilon: 0.9341452000014296
                                                                                                     lr: 0.0001
                                                                                                                     evaluation re
                             memory length: 133382
episode: 717
                                                                                                     1r: 0.0001
               score: 0.0
                                                      epsilon: 0.9339016600014349
                                                                                       steps: 123
                                                                                                                     evaluation re
episode: 718
                                                      epsilon: 0.9336561400014403
               score: 0.0
                             memory length: 133506
                                                                                       steps: 124
                                                                                                     lr: 0.0001
                                                                                                                     evaluation re
episode: 719
               score: 0.0
                             memory length: 133629
                                                      epsilon: 0.9334126000014455
                                                                                       steps: 123
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
episode: 720
               score: 0.0
                             memory length: 133753
                                                      epsilon: 0.9331670800014509
                                                                                       steps: 124
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
episode: 721
               score: 0.0
                             memory length: 133877
                                                      epsilon: 0.9329215600014562
                                                                                       steps: 124
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
episode: 722
               score: 2.0
                             memory length: 134097
                                                      epsilon: 0.9324859600014657
                                                                                       steps: 220
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
episode: 723
               score: 2.0
                             memory length: 134316
                                                      epsilon: 0.9320523400014751
                                                                                       steps: 219
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
episode: 724
               score: 1.0
                                                      epsilon: 0.9317157400014824
                                                                                                     lr: 0.0001
                             memory length: 134486
                                                                                       steps: 170
                                                                                                                     evaluation re
episode: 725
               score: 1.0
                             memory length: 134638
                                                      epsilon: 0.9314147800014889
                                                                                       steps: 152
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
episode: 726
               score: 0.0
                             memory length: 134762
                                                      epsilon: 0.9311692600014942
                                                                                       steps: 124
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
episode: 727
               score: 2.0
                             memory length: 134960
                                                      epsilon: 0.9307772200015028
                                                                                                      lr: 0.0001
                                                                                       steps: 198
                                                                                                                     evaluation re
episode: 728
               score: 1.0
                             memory length: 135130
                                                      epsilon: 0.9304406200015101
                                                                                       steps: 170
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
episode: 729
               score: 3.0
                             memory length: 135378
                                                      epsilon: 0.9299495800015207
                                                                                       steps: 248
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
episode: 730
               score: 0.0
                             memory length: 135502
                                                      epsilon: 0.9297040600015261
                                                                                       steps: 124
                                                                                                     lr: 0.0001
                                                                                                                     evaluation re
episode: 731
               score: 0.0
                             memory length: 135625
                                                      epsilon: 0.9294605200015313
                                                                                       steps: 123
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
episode: 732
               score: 1.0
                             memory length: 135795
                                                      epsilon: 0.9291239200015387
                                                                                       steps: 170
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
episode: 733
                             memory length: 135967
                                                      epsilon: 0.928783360001546
                                                                                      steps: 172
                                                                                                    lr: 0.0001
               score: 1.0
                                                                                                                    evaluation rev
episode: 734
                             memory length: 136137
                                                      epsilon: 0.9284467600015534
                                                                                       steps: 170
                                                                                                     lr: 0.0001
               score: 1.0
                                                                                                                     evaluation re
episode: 735
               score: 2.0
                             memory length: 136336
                                                      epsilon: 0.9280527400015619
                                                                                       steps: 199
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
episode: 736
               score: 0.0
                             memory length: 136459
                                                      epsilon: 0.9278092000015672
                                                                                       steps: 123
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
episode: 737
               score: 3.0
                             memory length: 136706
                                                      epsilon: 0.9273201400015778
                                                                                       steps: 247
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
episode: 738
               score: 2.0
                             memory length: 136887
                                                      epsilon: 0.9269617600015856
                                                                                       steps: 181
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
                             memory length: 137057
                                                      epsilon: 0.9266251600015929
                                                                                       steps: 170
                                                                                                      lr: 0.0001
episode: 739
               score: 1.0
                                                                                                                     evaluation re
episode: 740
               score: 0.0
                             memory length: 137181
                                                      epsilon: 0.9263796400015982
                                                                                       steps: 124
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
episode: 741
               score: 4.0
                             memory length: 137476
                                                      epsilon: 0.9257955400016109
                                                                                       steps: 295
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
               score: 0.0
                                                                                                                     evaluation re
episode: 742
                             memory length: 137600
                                                      epsilon: 0.9255500200016162
                                                                                       steps: 124
                                                                                                      lr: 0.0001
episode: 743
               score: 1.0
                             memory length: 137769
                                                      epsilon: 0.9252154000016235
                                                                                       steps: 169
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
                                                                                      steps: 198
                                                                                                    lr: 0.0001
episode: 744
               score: 2.0
                             memory length: 137967
                                                      ensilon: 0.924823360001632
                                                                                                                    evaluation rev
episode: 745
               score: 4.0
                             memory length: 138244
                                                      epsilon: 0.9242749000016439
                                                                                       steps: 277
                                                                                                     lr: 0.0001
                                                                                                                     evaluation re
                                                                                                      lr: 0.0001
episode: 746
               score: 1.0
                             memory length: 138414
                                                      epsilon: 0.9239383000016512
                                                                                       steps: 170
                                                                                                                     evaluation re
episode: 747
               score: 2.0
                                                                                                     lr: 0.0001
                             memory length: 138631
                                                      epsilon: 0.9235086400016606
                                                                                       steps: 217
                                                                                                                     evaluation re
                                                      epsilon: 0.92307502000167
episode: 748
               score: 2.0
                             memory length: 138850
                                                                                     steps: 219
                                                                                                    lr: 0.0001
                                                                                                                   evaluation rewa
                                                      epsilon: 0.9226255600016797
episode: 749
               score: 3.0
                             memory length: 139077
                                                                                       steps: 227
                                                                                                     lr: 0.0001
                                                                                                                     evaluation re
episode: 750
               score: 2.0
                             memory length: 139296
                                                      epsilon: 0.9221919400016891
                                                                                       steps: 219
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
episode: 751
               score: 1.0
                             memory length: 139466
                                                      epsilon: 0.9218553400016964
                                                                                       steps: 170
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
episode: 752
               score: 0.0
                             memory length: 139590
                                                      epsilon: 0.9216098200017018
                                                                                       steps: 124
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
episode: 753
               score: 2.0
                             memory length: 139812
                                                      epsilon: 0.9211702600017113
                                                                                       steps: 222
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
                                                                                                                     evaluation re
episode: 754
               score: 2.0
                             memory length: 140011
                                                      epsilon: 0.9207762400017199
                                                                                       steps: 199
                                                                                                      lr: 0.0001
episode: 755
               score: 1.0
                                                      epsilon: 0.9204733000017264
                                                                                                      lr: 0.0001
                             memory length: 140164
                                                                                       steps: 153
                                                                                                                     evaluation re
                                                      epsilon: 0.9200396800017359
episode: 756
               score: 2.0
                             memory length: 140383
                                                                                       steps: 219
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
```

episode:		score:			length:			0.9197941600017412	steps: 124	lr: 0.0001	evaluation re
episode:				_	length:		_		_		evaluation re
-		score:		_	-		-	0.9194951800017477	steps: 151	lr: 0.0001	
episode:		score:		_	length:		_	0.919249660001753	steps: 124	lr: 0.0001	evaluation rev
episode:	760	score:	0.0	memory	length:	140906	epsilon:	0.9190041400017583	steps: 124	lr: 0.0001	evaluation re
episode:	761	score:	0.0	memory	length:	141030	epsilon:	0.9187586200017637	steps: 124	lr: 0.0001	evaluation re
episode:		score:		_	length:		_	0.9183250000017731	steps: 219	lr: 0.0001	evaluation re
episode:		score:		_	length:		-	0.9179309800017816	steps: 199	lr: 0.0001	evaluation re
_				_	-		_		_		
episode:		score:		_	length:		-	0.9176300200017882	steps: 152	lr: 0.0001	evaluation r∈
episode:	765	score:	0.0	memory	length:	141724	epsilon:	0.9173845000017935	steps: 124	lr: 0.0001	evaluation re
episode:	766	score:	3.0	memory	length:	141971	epsilon:	0.9168954400018041	steps: 247	lr: 0.0001	evaluation re
episode:		score:		_	length:		-	0.9166499200018094	steps: 124	lr: 0.0001	evaluation re
-		score:		_	-		_		-	lr: 0.0001	
episode:				_	length:		-	0.9162004600018192	steps: 227		evaluation re
episode:	769	score:	2.0	memory	length:	142541	epsilon:	0.9157668400018286	steps: 219	lr: 0.0001	evaluation re
episode:	770	score:	1.0	memory	length:	142710	epsilon:	0.9154322200018359	steps: 169	lr: 0.0001	evaluation r∈
episode:	771	score:	2.0	memory	length:	142909	epsilon:	0.9150382000018444	steps: 199	lr: 0.0001	evaluation re
episode:		score:		_	length:		-	0.9147016000018517	steps: 170	lr: 0.0001	evaluation re
				_	_		-		-		
episode:		score:		_	length:		-	0.9143075800018603	steps: 199	lr: 0.0001	evaluation re
episode:	774	score:		memory	length:	143448	epsilon:	0.9139709800018676	steps: 170	lr: 0.0001	evaluation re
episode:	775	score:	2.0	memory	length:	143668	epsilon:	0.9135353800018771	steps: 220	lr: 0.0001	evaluation re
episode:	776	score:	0.0	memory	length:	143792	epsilon:	0.9132898600018824	steps: 124	lr: 0.0001	evaluation re
episode:		score:		_	length:		-	0.9127968400018931	steps: 249	lr: 0.0001	evaluation re
_				_	_		_		_		
episode:		score:		_	length:		-	0.9123117400019036	steps: 245	lr: 0.0001	evaluation re
episode:	779	score:	1.0	memory	length:	144459	epsilon:	0.9119692000019111	steps: 173	lr: 0.0001	evaluation re
episode:	780	score:	2.0	memory	length:	144658	epsilon:	0.9115751800019196	steps: 199	lr: 0.0001	evaluation r∈
episode:	781	score:	2.0	memory	length:	144877	ensilon:	0.911141560001929	steps: 219	lr: 0.0001	evaluation rev
episode:		score:		_	length:		-	0.9108049600019363	steps: 219	lr: 0.0001	evaluation re
-				_	-		-		-		
episode:		score:			length:		-	0.9103753000019457	steps: 217	lr: 0.0001	evaluation re
episode:	784	score:	1.0	memory	length:	145435	epsilon:	0.910036720001953	steps: 171	lr: 0.0001	evaluation rev
episode:	785	score:	2.0	memory	length:	145635	epsilon:	0.9096407200019616	steps: 200	lr: 0.0001	evaluation re
episode:		score:		_	length:		_	0.9093971800019669	steps: 123	lr: 0.0001	evaluation re
-				_	-		-		-		
episode:		score:		_	length:		-	0.9090566200019743	steps: 172	lr: 0.0001	evaluation re
episode:	788	score:	3.0	memory	length:	146157	epsilon:	0.908607160001984	steps: 227	lr: 0.0001	evaluation rev
episode:	789	score:	1.0	memory	length:	146309	epsilon:	0.9083062000019906	steps: 152	lr: 0.0001	evaluation r∈
episode:	790	score:	2.0	memory	length:	146508	epsilon:	0.9079121800019991	steps: 199	lr: 0.0001	evaluation re
episode:		score:		_	length:		_	0.9075181600020077	steps: 199	lr: 0.0001	evaluation re
-				_	-		-		-		
episode:		score:		_	length:		-	0.9070845400020171	steps: 219	lr: 0.0001	evaluation re
episode:	793	score:		memory	length:	147190	epsilon:	0.9065618200020285	steps: 264	lr: 0.0001	evaluation re
episode:	794	score:	0.0	memory	length:	147314	epsilon:	0.9063163000020338	steps: 124	lr: 0.0001	evaluation re
episode:	795	score:	3.0	memory	length:	147561	epsilon:	0.9058272400020444	steps: 247	lr: 0.0001	evaluation re
episode:		score:		_	length:		-	0.905338180002055	steps: 247	lr: 0.0001	evaluation rev
_				_	_		-		_		
episode:		score:		_	length:		-	0.9050926600020603	steps: 124	lr: 0.0001	evaluation re
episode:		score:		_	length:		-	0.9048491200020656	steps: 123	lr: 0.0001	evaluation re
episode:	799	score:	3.0	memory	length:	148302	epsilon:	0.9043600600020762	steps: 247	lr: 0.0001	evaluation re
episode:	800	score:	3.0	memory	length:	148538	epsilon:	0.9038927800020864	steps: 236	lr: 0.0001	evaluation re
episode:		score:		_	length:		-	0.9035918200020929	steps: 152	lr: 0.0001	evaluation re
-				_	_		-		_		
episode:		score:		_	length:		-	0.9033463000020983	steps: 124	lr: 0.0001	evaluation re
episode:		score:	2.0	_	length:		_	0.9029522800021068	steps: 199	lr: 0.0001	evaluation re
episode:	804	score:	1.0	memory	length:	149165	epsilon:	0.9026513200021133	steps: 152	lr: 0.0001	evaluation r∈
episode:	805	score:	0.0	memory	length:	149289	epsilon:	0.9024058000021187	steps: 124	lr: 0.0001	evaluation re
episode:		score:		_	length:		_	0.902160280002124	steps: 124	lr: 0.0001	evaluation rev
episode:				_	-		-		-		
-		score:		_	length:		-	0.9017048800021339	steps: 230	lr: 0.0001	evaluation re
episode:		score:		_	length:		_	0.9012633400021435	steps: 223	lr: 0.0001	evaluation re
episode:	809	score:	1.0	memory	length:	150018	epsilon:	0.90096238000215	steps: 152	lr: 0.0001	evaluation rewa
episode:	810	score:	1.0	memory	length:	150189	epsilon:	0.9006238000021574	steps: 171	lr: 0.0001	evaluation re
episode:		score:		_	length:		_	0.9002297800021659	steps: 199	lr: 0.0001	evaluation re
episode:		score:		_	length:		-	0.8997783400021757	steps: 228	lr: 0.0001	evaluation re
_				_	-		-		_		
episode:		score:		_	length:		-	0.899441740002183	steps: 170	lr: 0.0001	evaluation rev
episode:	814	score:	5.0	memory	length:	151095	epsilon:	0.8988299200021963	steps: 309	lr: 0.0001	evaluation re
episode:	815	score:	0.0	memory	length:	151219	epsilon:	0.8985844000022016	steps: 124	lr: 0.0001	evaluation re
episode:	816	score:	3.0	memory	length:	151466	epsilon:	0.8980953400022123	steps: 247	lr: 0.0001	evaluation re
episode:		score:		_	length:		_	0.8978498200022176	steps: 124	lr: 0.0001	evaluation re
-		score:		_	length:		_		-		
episode:				_	_		-	0.8974558000022261	steps: 199	lr: 0.0001	evaluation re
episode:		score:		_	length:		_	0.8971152400022335	steps: 172	lr: 0.0001	evaluation re
episode:	820	score:	2.0	memory	length:	152177	epsilon:	0.8966875600022428	steps: 216	lr: 0.0001	evaluation re
episode:	821	score:	1.0	memory	length:	152347	epsilon:	0.8963509600022501	steps: 170	lr: 0.0001	evaluation re
episode:	822	score:	3.0	_	length:		_	0.8958599200022608	steps: 248	lr: 0.0001	evaluation re
episode:		score:		_	length:		-	0.8956163800022661	steps: 240	lr: 0.0001	evaluation re
-				_	-		_		-		
episode:		score:		_	length:		_	0.8951827600022755	steps: 219	lr: 0.0001	evaluation re
episode:		score:		_	length:		-	0.8949372400022808	steps: 124	lr: 0.0001	evaluation re
episode:	826	score:	0.0	memory	length:	153185	epsilon:	0.8946917200022861	steps: 124	lr: 0.0001	evaluation re
episode:		score:		_	length:		-	0.8942620600022955	steps: 217	lr: 0.0001	evaluation re
episode:		score:		_	length:		_	0.893961100002302	steps: 152	lr: 0.0001	evaluation rev
-				_	-		-		-		
episode:		score:		_	length:		-	0.8937155800023073	steps: 124	lr: 0.0001	evaluation re
episode:		score:		_	length:		_	0.8934700600023127	steps: 124	lr: 0.0001	evaluation re
episode:	831	score:	0.0	memory	length:	153926	epsilon:	0.893224540002318	steps: 124	lr: 0.0001	evaluation rev
episode:	832	score:		memory	length:	154175	epsilon:	0.8927315200023287	steps: 249	lr: 0.0001	evaluation re
episode:		score:		_	length:		-	0.892487980002334	steps: 123	lr: 0.0001	evaluation rev
-				_	-		-		-		
episode:		score:		_	length:		_	0.8920939600023425	steps: 199	lr: 0.0001	evaluation re
episode:		score:		_	length:		_	0.8918484400023479	steps: 124	lr: 0.0001	evaluation re
episode:	836	score:	1.0	memory	length:	154791	epsilon:	0.8915118400023552	steps: 170	lr: 0.0001	evaluation re
episode:	837	score:	3.0	memory	length:	155038	epsilon:	0.8910227800023658	steps: 247	lr: 0.0001	evaluation re
episode:		score:		_	length:		-	0.8907772600023711	steps: 124	lr: 0.0001	evaluation re
-							_		_		
episode:		score:			length:		_	0.8905317400023764	steps: 124	lr: 0.0001	evaluation re
episode:		score:		_	length:		_	0.8901931600023838	steps: 171	lr: 0.0001	evaluation re
	841	gcore.	3 0	memorv	lenath•	155703	engilon•	0 8897060800023944	stens: 246	1r. 0 0001	evaluation re
eniande.								ollTo-f6PgOPdUvIV &r			13/68

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memora renden. 100100
                                                                                       acepa. 440
chracae. oar
               BUULE. J.V
                                                      chattom 0.003/00000007334
                                                                                                      TT . U . U U U T
                                                                                                                      evaruacion i
episode: 842
               score: 0.0
                             memory length: 155827
                                                      epsilon: 0.8894605600023997
                                                                                       steps: 124
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 843
               score: 2.0
                             memory length: 156046
                                                      epsilon: 0.8890269400024091
                                                                                       steps: 219
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 844
               score: 1.0
                             memory length: 156197
                                                      epsilon: 0.8887279600024156
                                                                                       steps: 151
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 845
               score: 2.0
                             memory length: 156396
                                                      epsilon: 0.8883339400024242
                                                                                       steps: 199
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
                             memory length: 156641
                                                                                                      lr: 0.0001
episode: 846
               score: 3.0
                                                      epsilon: 0.8878488400024347
                                                                                       steps: 245
                                                                                                                      evaluation re
                             memory length: 156937
                                                      epsilon: 0.8872627600024474
                                                                                                      lr: 0.0001
episode: 847
               score: 4.0
                                                                                       steps: 296
                                                                                                                      evaluation re
episode: 848
               score: 3.0
                             memory length: 157170
                                                      epsilon: 0.8868014200024574
                                                                                       steps: 233
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 849
               score: 2.0
                             memory length: 157372
                                                      epsilon: 0.8864014600024661
                                                                                       steps: 202
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 850
               score: 1.0
                             memory length: 157542
                                                      epsilon: 0.8860648600024734
                                                                                       steps: 170
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
               score: 0.0
                                                                                                      lr: 0.0001
episode: 851
                             memory length: 157666
                                                      epsilon: 0.8858193400024788
                                                                                       steps: 124
                                                                                                                      evaluation re
episode: 852
               score: 1.0
                             memory length: 157838
                                                      epsilon: 0.8854787800024861
                                                                                       steps: 172
                                                                                                      1r: 0.0001
                                                                                                                      evaluation re
episode: 853
               score: 0.0
                             memory length: 157962
                                                      epsilon: 0.8852332600024915
                                                                                       steps: 124
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 854
               score: 1.0
                                                      epsilon: 0.884932300002498
                                                                                      steps: 152
                             memory length: 158114
                                                                                                     lr: 0.0001
                                                                                                                     evaluation rev
episode: 855
                             memory length: 158285
                                                                                                      lr: 0.0001
               score: 1.0
                                                      epsilon: 0.8845937200025054
                                                                                       steps: 171
                                                                                                                      evaluation re
episode: 856
               score: 4.0
                             memory length: 158582
                                                      epsilon: 0.8840056600025181
                                                                                       steps: 297
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 857
               score: 4.0
                             memory length: 158878
                                                      epsilon: 0.8834195800025308
                                                                                       steps: 296
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
                             memory length: 159061
episode: 858
                                                      ensilon: 0.8830572400025387
                                                                                       steps: 183
                                                                                                      1r: 0.0001
                                                                                                                      evaluation re
               score: 2.0
episode: 859
               score: 1.0
                             memory length: 159232
                                                      epsilon: 0.8827186600025461
                                                                                       steps: 171
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 860
               score: 2.0
                             memory length: 159450
                                                      epsilon: 0.8822870200025554
                                                                                       steps: 218
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 861
               score: 2.0
                             memory length: 159670
                                                      epsilon: 0.8818514200025649
                                                                                       steps: 220
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 862
                                                      epsilon: 0.8816059000025702
               score: 0.0
                             memory length: 159794
                                                                                       steps: 124
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 863
                                                      epsilon: 0.8813603800025755
               score: 0.0
                             memory length: 159918
                                                                                       steps: 124
                                                                                                      1r: 0.0001
                                                                                                                      evaluation re
episode: 864
               score: 0.0
                             memory length: 160042
                                                      epsilon: 0.8811148600025809
                                                                                       steps: 124
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 865
               score: 0.0
                             memory length: 160165
                                                      epsilon: 0.8808713200025862
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
                                                                                       steps: 123
episode: 866
               score: 0.0
                             memory length: 160288
                                                      epsilon: 0.8806277800025915
                                                                                       steps: 123
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 867
               score: 1.0
                             memory length: 160458
                                                      epsilon: 0.8802911800025988
                                                                                       steps: 170
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
                             memory length: 160628
                                                      epsilon: 0.8799545800026061
                                                                                       steps: 170
                                                                                                      lr: 0.0001
episode: 868
               score: 1.0
                                                                                                                      evaluation re
episode: 869
               score: 0.0
                             memory length: 160752
                                                      epsilon: 0.8797090600026114
                                                                                       steps: 124
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 870
               score: 3.0
                             memory length: 160981
                                                      epsilon: 0.8792556400026212
                                                                                                      lr: 0.0001
                                                                                       steps: 229
                                                                                                                      evaluation re
episode: 871
               score: 1.0
                             memory length: 161151
                                                      epsilon: 0.8789190400026285
                                                                                       steps: 170
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 872
               score: 3.0
                             memory length: 161378
                                                      ensilon: 0.8784695800026383
                                                                                       steps: 227
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
               score: 2.0
                                                      epsilon: 0.8780735800026469
episode: 873
                             memory length: 161578
                                                                                       steps: 200
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 874
               score: 2.0
                             memory length: 161776
                                                      epsilon: 0.8776815400026554
                                                                                       steps: 198
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 875
               score: 0.0
                             memory length: 161900
                                                      epsilon: 0.8774360200026607
                                                                                                      lr: 0.0001
                                                                                       steps: 124
                                                                                                                      evaluation re
episode: 876
                                                      epsilon: 0.8771905000026661
               score: 0.0
                             memory length: 162024
                                                                                       steps: 124
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 877
               score: 1.0
                             memory length: 162197
                                                      epsilon: 0.8768479600026735
                                                                                       steps: 173
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
                                                                                                      lr: 0.0001
episode: 878
                             memory length: 162396
                                                      epsilon: 0.8764539400026821
                                                                                       steps: 199
                                                                                                                      evaluation re
               score: 2.0
                                                                                                      lr: 0.0001
episode: 879
               score: 3.0
                             memory length: 162641
                                                      epsilon: 0.8759688400026926
                                                                                       steps: 245
                                                                                                                      evaluation re
episode: 880
               score: 0.0
                             memory length: 162764
                                                      epsilon: 0.8757253000026979
                                                                                       steps: 123
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 881
               score: 1.0
                             memory length: 162933
                                                      epsilon: 0.8753906800027051
                                                                                       steps: 169
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 882
               score: 0.0
                             memory length: 163057
                                                      epsilon: 0.8751451600027105
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
                                                                                       steps: 124
episode: 883
               score: 3.0
                             memory length: 163301
                                                      epsilon: 0.874662040002721
                                                                                      steps: 244
                                                                                                     lr: 0.0001
                                                                                                                     evaluation rev
episode: 884
               score: 2.0
                             memory length: 163505
                                                      epsilon: 0.8742581200027297
                                                                                       steps: 204
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 885
               score: 3.0
                                                                                       steps: 267
                             memory length: 163772
                                                      epsilon: 0.8737294600027412
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 886
               score: 0.0
                             memory length: 163896
                                                      epsilon: 0.8734839400027465
                                                                                       steps: 124
                                                                                                      1r: 0.0001
                                                                                                                      evaluation re
episode: 887
               score: 2.0
                             memory length: 164116
                                                      epsilon: 0.873048340002756
                                                                                                     lr: 0.0001
                                                                                      steps: 220
                                                                                                                     evaluation rev
episode: 888
               score: 3.0
                             memory length: 164382
                                                      epsilon: 0.8725216600027674
                                                                                       steps: 266
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
                             memory length: 164505
episode: 889
               score: 0.0
                                                      ensilon: 0.8722781200027727
                                                                                       steps: 123
                                                                                                      1r: 0.0001
                                                                                                                      evaluation re
episode: 890
                                                      epsilon: 0.872034580002778
               score: 0.0
                             memory length: 164628
                                                                                      steps: 123
                                                                                                     lr: 0.0001
                                                                                                                     evaluation rev
episode: 891
               score: 2.0
                             memory length: 164847
                                                      epsilon: 0.8716009600027874
                                                                                       steps: 219
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 892
               score: 2.0
                             memory length: 165046
                                                      epsilon: 0.871206940002796
                                                                                      steps: 199
                                                                                                     lr: 0.0001
                                                                                                                     evaluation rev
episode: 893
                                                      epsilon: 0.8706604600028078
               score: 4.0
                             memory length: 165322
                                                                                       steps: 276
                                                                                                      1r: 0.0001
                                                                                                                      evaluation re
episode: 894
               score: 4.0
                             memory length: 165599
                                                      epsilon: 0.8701120000028197
                                                                                       steps: 277
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 895
               score: 0.0
                             memory length: 165722
                                                      epsilon: 0.869868460002825
                                                                                      steps: 123
                                                                                                     lr: 0.0001
                                                                                                                     evaluation rev
episode: 896
               score: 0.0
                             memory length: 165846
                                                      epsilon: 0.8696229400028304
                                                                                                      lr: 0.0001
                                                                                       steps: 124
                                                                                                                      evaluation re
                                                      epsilon: 0.8691259600028411
                                                                                                                      evaluation re
episode: 897
               score: 3.0
                             memory length: 166097
                                                                                       steps: 251
                                                                                                      lr: 0.0001
episode: 898
               score: 2.0
                             memory length: 166298
                                                      epsilon: 0.8687279800028498
                                                                                       steps: 201
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 899
               score: 0.0
                             memory length: 166422
                                                      epsilon: 0.8684824600028551
                                                                                       steps: 124
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 900
               score: 2.0
                             memory length: 166621
                                                      epsilon: 0.8680884400028637
                                                                                       steps: 199
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
               score: 0.0
                             memory length: 166744
                                                      epsilon: 0.867844900002869
                                                                                                     lr: 0.0001
episode: 901
                                                                                      steps: 123
                                                                                                                     evaluation rev
episode: 902
               score: 5.0
                             memory length: 167067
                                                      epsilon: 0.8672053600028828
                                                                                       steps: 323
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 903
                                                                                                      1r: 0.0001
               score: 2.0
                             memory length: 167266
                                                      ensilon: 0.8668113400028914
                                                                                       steps: 199
                                                                                                                      evaluation re
episode: 904
               score: 3.0
                             memory length: 167515
                                                      epsilon: 0.8663183200029021
                                                                                       steps: 249
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 905
               score: 3.0
                             memory length: 167741
                                                      epsilon: 0.8658708400029118
                                                                                       steps: 226
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
                             memory length: 167910
                                                                                                      lr: 0.0001
episode: 906
               score: 1.0
                                                      epsilon: 0.8655362200029191
                                                                                       steps: 169
                                                                                                                      evaluation re
episode: 907
                                                      epsilon: 0.8651422000029276
                                                                                                                      evaluation re
               score: 2.0
                             memory length: 168109
                                                                                       steps: 199
                                                                                                      lr: 0.0001
               score: 0.0
                                                                                                     lr: 0.0001
episode: 908
                             memory length: 168233
                                                      epsilon: 0.864896680002933
                                                                                      steps: 124
                                                                                                                     evaluation rev
episode: 909
                                                      epsilon: 0.8645957200029395
                                                                                                      lr: 0.0001
               score: 1.0
                             memory length: 168385
                                                                                       steps: 152
                                                                                                                      evaluation re
episode: 910
                                                                                                      lr: 0.0001
               score: 0.0
                             memory length: 168509
                                                      epsilon: 0.8643502000029448
                                                                                       steps: 124
                                                                                                                      evaluation re
                                                      epsilon: 0.8640096400029522
episode: 911
               score: 1.0
                             memory length: 168681
                                                                                       steps: 172
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 912
               score: 1.0
                             memory length: 168851
                                                      epsilon: 0.8636730400029595
                                                                                       steps: 170
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
               score: 2.0
episode: 913
                             memory length: 169053
                                                      epsilon: 0.8632730800029682
                                                                                       steps: 202
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 914
               score: 4.0
                             memory length: 169370
                                                      epsilon: 0.8626454200029818
                                                                                       steps: 317
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 915
               score: 0.0
                             memory length: 169494
                                                      epsilon: 0.8623999000029872
                                                                                       steps: 124
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 916
               score: 1.0
                                                      epsilon: 0.8620573600029946
                             memory length: 169667
                                                                                                      lr: 0.0001
                                                                                       steps: 173
                                                                                                                      evaluation re
episode: 917
                                                                                                      1r: 0.0001
               score: 3.0
                             memory length: 169917
                                                      epsilon: 0.8615623600030053
                                                                                       steps: 250
                                                                                                                      evaluation re
episode: 918
               score: 1.0
                             memory length: 170087
                                                      epsilon: 0.8612257600030127
                                                                                       steps: 170
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
               score: 0.0
episode: 919
                             memory length: 170210
                                                      epsilon: 0.8609822200030179
                                                                                       steps: 123
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 920
               score: 2.0
                             memory length: 170431
                                                      ensilon: 0.8605446400030274
                                                                                                      1r: 0.0001
                                                                                                                      evaluation re
                                                                                       steps: 221
episode: 921
               score: 0.0
                             memory length: 170554
                                                      epsilon: 0.8603011000030327
                                                                                       steps: 123
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 922
               score: 4.0
                             memory length: 170872
                                                      epsilon: 0.8596714600030464
                                                                                       steps: 318
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 923
               score: 4.0
                             memory length: 171147
                                                      epsilon: 0.8591269600030582
                                                                                       steps: 275
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 924
               score: 1.0
                             memory length: 171318
                                                      epsilon: 0.8587883800030656
                                                                                       steps: 171
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 925
               score: 0.0
                             memory length: 171442
                                                      epsilon: 0.8585428600030709
                                                                                       steps: 124
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
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memory length: 1/1593
                                                      epsilon: 0.85824388000307/4
                                                                                                      1r: 0.0001
episode: 926
               score: 1.0
                                                                                       steps: 151
                                                                                                                      evaluation re
                             memory length: 171838
               score: 3.0
                                                      epsilon: 0.8577587800030879
                                                                                                      lr: 0.0001
episode: 927
                                                                                       steps: 245
                                                                                                                      evaluation re
episode: 928
               score: 0.0
                             memory length: 171962
                                                      epsilon: 0.8575132600030932
                                                                                       steps: 124
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 929
               score: 0.0
                             memory length: 172086
                                                      epsilon: 0.8572677400030986
                                                                                       steps: 124
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
               score: 2.0
episode: 930
                             memory length: 172304
                                                      epsilon: 0.856836100003108
                                                                                      steps: 218
                                                                                                     lr: 0.0001
                                                                                                                     evaluation rev
                                                      epsilon: 0.8565331600031145
episode: 931
               score: 1.0
                             memory length: 172457
                                                                                       steps: 153
                                                                                                      1r: 0.0001
                                                                                                                      evaluation re
episode: 932
               score: 2.0
                             memory length: 172655
                                                      epsilon: 0.856141120003123
                                                                                      steps: 198
                                                                                                     lr: 0.0001
                                                                                                                     evaluation rev
episode: 933
               score: 0.0
                             memory length: 172779
                                                      epsilon: 0.8558956000031284
                                                                                       steps: 124
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 934
                                                                                                      1r: 0.0001
               score: 2.0
                             memory length: 172998
                                                      ensilon: 0.8554619800031378
                                                                                       steps: 219
                                                                                                                      evaluation re
episode: 935
               score: 2.0
                             memory length: 173217
                                                      epsilon: 0.8550283600031472
                                                                                       steps: 219
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 936
               score: 0.0
                             memory length: 173341
                                                      epsilon: 0.8547828400031525
                                                                                       steps: 124
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 937
               score: 2.0
                                                                                                      lr: 0.0001
                             memory length: 173563
                                                      epsilon: 0.8543432800031621
                                                                                       steps: 222
                                                                                                                      evaluation re
episode: 938
               score: 0.0
                             memory length: 173687
                                                      epsilon: 0.8540977600031674
                                                                                       steps: 124
                                                                                                      1r: 0.0001
                                                                                                                      evaluation re
episode: 939
               score: 1.0
                             memory length: 173859
                                                      epsilon: 0.8537572000031748
                                                                                       steps: 172
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 940
               score: 0.0
                             memory length: 173983
                                                      epsilon: 0.8535116800031801
                                                                                                      lr: 0.0001
                                                                                       steps: 124
                                                                                                                      evaluation re
episode: 941
               score: 2.0
                             memory length: 174182
                                                      epsilon: 0.8531176600031887
                                                                                       steps: 199
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
               score: 2.0
                                                      epsilon: 0.8526840400031981
episode: 942
                             memory length: 174401
                                                                                       steps: 219
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 943
               score: 2.0
                             memory length: 174601
                                                      epsilon: 0.8522880400032067
                                                                                       steps: 200
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 944
               score: 0.0
                             memory length: 174725
                                                      epsilon: 0.852042520003212
                                                                                      steps: 124
                                                                                                     lr: 0.0001
                                                                                                                     evaluation rev
episode: 945
               score: 0.0
                             memory length: 174849
                                                      epsilon: 0.8517970000032173
                                                                                       steps: 124
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 946
               score: 2.0
                             memory length: 175048
                                                      epsilon: 0.8514029800032259
                                                                                       steps: 199
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
               score: 3.0
episode: 947
                             memory length: 175299
                                                      epsilon: 0.8509060000032367
                                                                                       steps: 251
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
                                                      epsilon: 0.8505654400032441
episode: 948
               score: 1.0
                             memory length: 175471
                                                                                       steps: 172
                                                                                                      1r: 0.0001
                                                                                                                      evaluation re
episode: 949
               score: 0.0
                             memory length: 175594
                                                      epsilon: 0.8503219000032494
                                                                                       steps: 123
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 950
               score: 2.0
                                                                                                                      evaluation re
                             memory length: 175812
                                                                                                      lr: 0.0001
                                                      epsilon: 0.8498902600032587
                                                                                       steps: 218
episode: 951
               score: 3.0
                                                      epsilon: 0.8493952600032695
                                                                                       steps: 250
                                                                                                      lr: 0.0001
                             memory length: 176062
                                                                                                                      evaluation re
episode: 952
               score: 3.0
                             memory length: 176292
                                                      epsilon: 0.8489398600032794
                                                                                       steps: 230
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 953
               score: 0.0
                             memory length: 176416
                                                      epsilon: 0.8486943400032847
                                                                                       steps: 124
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 954
               score: 1.0
                             memory length: 176587
                                                      epsilon: 0.848355760003292
                                                                                      steps: 171
                                                                                                     lr: 0.0001
                                                                                                                     evaluation rev
episode: 955
               score: 1.0
                             memory length: 176739
                                                      epsilon: 0.8480548000032986
                                                                                       steps: 152
                                                                                                      1r: 0.0001
                                                                                                                      evaluation re
                                                      epsilon: 0.8476251400033079
episode: 956
               score: 2.0
                             memory length: 176956
                                                                                                      lr: 0.0001
                                                                                       steps: 217
                                                                                                                      evaluation re
episode: 957
                                                                                       steps: 152
               score: 1.0
                             memory length: 177108
                                                      epsilon: 0.8473241800033144
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
                             memory length: 177307
episode: 958
                                                                                                     lr: 0.0001
               score: 2.0
                                                      epsilon: 0.846930160003323
                                                                                      steps: 199
                                                                                                                     evaluation rev
               score: 3.0
                                                      epsilon: 0.8464450600033335
episode: 959
                             memory length: 177552
                                                                                                      lr: 0.0001
                                                                                       steps: 245
                                                                                                                      evaluation re
episode: 960
               score: 3.0
                             memory length: 177818
                                                      epsilon: 0.845918380003345
                                                                                      steps: 266
                                                                                                     lr: 0.0001
                                                                                                                     evaluation rev
episode: 961
               score: 0.0
                             memory length: 177942
                                                      epsilon: 0.8456728600033503
                                                                                       steps: 124
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 962
               score: 0.0
                             memory length: 178066
                                                      epsilon: 0.8454273400033556
                                                                                       steps: 124
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
               score: 5.0
                             memory length: 178392
                                                                                                      lr: 0.0001
episode: 963
                                                      epsilon: 0.8447818600033696
                                                                                       steps: 326
                                                                                                                      evaluation re
episode: 964
               score: 2.0
                             memory length: 178573
                                                      epsilon: 0.8444234800033774
                                                                                       steps: 181
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 965
                                                      epsilon: 0.8441799400033827
                                                                                                      lr: 0.0001
               score: 0.0
                             memory length: 178696
                                                                                       steps: 123
                                                                                                                      evaluation re
episode: 966
               score: 1.0
                             memory length: 178847
                                                      epsilon: 0.8438809600033892
                                                                                       steps: 151
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 967
               score: 2.0
                             memory length: 179046
                                                      epsilon: 0.8434869400033977
                                                                                       steps: 199
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
               score: 0.0
                                                                                                     lr: 0.0001
episode: 968
                             memory length: 179169
                                                      epsilon: 0.843243400003403
                                                                                      steps: 123
                                                                                                                     evaluation rev
episode: 969
               score: 1.0
                             memory length: 179321
                                                      epsilon: 0.8429424400034096
                                                                                       steps: 152
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 970
               score: 2.0
                             memory length: 179543
                                                      epsilon: 0.8425028800034191
                                                                                       steps: 222
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 971
               score: 0.0
                                                      epsilon: 0.8422573600034244
                             memory length: 179667
                                                                                       steps: 124
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
                             memory length: 179886
episode: 972
               score: 2.0
                                                                                       steps: 219
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
                                                      epsilon: 0.8418237400034339
episode: 973
               score: 0.0
                             memory length: 180010
                                                      epsilon: 0.8415782200034392
                                                                                       steps: 124
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 974
               score: 3.0
                             memory length: 180257
                                                      epsilon: 0.8410891600034498
                                                                                       steps: 247
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 975
                             memory length: 180456
                                                                                                      1r: 0.0001
               score: 2.0
                                                      ensilon: 0.8406951400034584
                                                                                       steps: 199
                                                                                                                      evaluation re
episode: 976
               score: 1.0
                             memory length: 180627
                                                      epsilon: 0.8403565600034657
                                                                                       steps: 171
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 977
               score: 0.0
                             memory length: 180750
                                                      epsilon: 0.840113020003471
                                                                                      steps: 123
                                                                                                     lr: 0.0001
                                                                                                                     evaluation rev
episode: 978
               score: 2.0
                             memory length: 180951
                                                      epsilon: 0.8397150400034796
                                                                                       steps: 201
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 979
               score: 1.0
                             memory length: 181121
                                                      epsilon: 0.8393784400034869
                                                                                       steps: 170
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 980
                                                      epsilon: 0.8391329200034923
               score: 0.0
                             memory length: 181245
                                                                                       steps: 124
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 981
               score: 4.0
                             memory length: 181559
                                                      epsilon: 0.8385112000035058
                                                                                       steps: 314
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 982
               score: 1.0
                             memory length: 181730
                                                      epsilon: 0.8381726200035131
                                                                                       steps: 171
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
                                                      epsilon: 0.8379271000035184
episode: 983
               score: 0.0
                             memory length: 181854
                                                                                       steps: 124
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 984
               score: 2.0
                             memory length: 182054
                                                      epsilon: 0.837531100003527
                                                                                      steps: 200
                                                                                                     lr: 0.0001
                                                                                                                     evaluation rev
episode: 985
               score: 2.0
                             memory length: 182273
                                                      epsilon: 0.8370974800035365
                                                                                       steps: 219
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 986
               score: 0.0
                                                                                                      lr: 0.0001
                             memory length: 182396
                                                      epsilon: 0.8368539400035417
                                                                                       steps: 123
                                                                                                                      evaluation re
               score: 0.0
                                                                                                      lr: 0.0001
episode: 987
                             memory length: 182520
                                                      epsilon: 0.8366084200035471
                                                                                       steps: 124
                                                                                                                      evaluation re
episode: 988
               score: 0.0
                             memory length: 182644
                                                      epsilon: 0.8363629000035524
                                                                                                      lr: 0.0001
                                                                                       steps: 124
                                                                                                                      evaluation re
episode: 989
               score: 1.0
                             memory length: 182814
                                                      ensilon: 0.8360263000035597
                                                                                       steps: 170
                                                                                                      1r: 0.0001
                                                                                                                      evaluation re
episode: 990
                                                                                      steps: 123
               score: 0.0
                             memory length: 182937
                                                      epsilon: 0.835782760003565
                                                                                                     lr: 0.0001
                                                                                                                     evaluation rev
episode: 991
               score: 1.0
                             memory length: 183109
                                                      epsilon: 0.8354422000035724
                                                                                       steps: 172
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 992
               score: 0.0
                             memory length: 183233
                                                      epsilon: 0.8351966800035777
                                                                                       steps: 124
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 993
               score: 1.0
                             memory length: 183404
                                                      epsilon: 0.8348581000035851
                                                                                       steps: 171
                                                                                                      1r: 0.0001
                                                                                                                      evaluation re
                                                                                                      lr: 0.0001
episode: 994
               score: 2.0
                             memory length: 183603
                                                      epsilon: 0.8344640800035936
                                                                                       steps: 199
                                                                                                                      evaluation re
episode: 995
               score: 2.0
                             memory length: 183822
                                                      epsilon: 0.834030460003603
                                                                                      steps: 219
                                                                                                     lr: 0.0001
                                                                                                                     evaluation rev
episode: 996
               score: 0.0
                             memory length: 183946
                                                      epsilon: 0.8337849400036084
                                                                                       steps: 124
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 997
               score: 2.0
                             memory length: 184167
                                                      epsilon: 0.8333473600036179
                                                                                       steps: 221
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 998
               score: 1.0
                             memory length: 184337
                                                      epsilon: 0.8330107600036252
                                                                                       steps: 170
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 999
               score: 0.0
                             memory length: 184460
                                                      epsilon: 0.8327672200036305
                                                                                       steps: 123
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 1000
                score: 2.0
                              memory length: 184661
                                                        epsilon: 0.8323692400036391
                                                                                        steps: 201
                                                                                                       lr: 0.0001
                                                                                                                       evaluation 1
episode: 1001
                score: 0.0
                              memory length: 184785
                                                        epsilon: 0.8321237200036444
                                                                                        steps: 124
                                                                                                       lr: 0.0001
                                                                                                                       evaluation 1
episode: 1002
                score: 2.0
                              memory length: 185005
                                                        epsilon: 0.8316881200036539
                                                                                        steps: 220
                                                                                                       lr: 0.0001
                                                                                                                       evaluation 1
episode: 1003
                score: 1.0
                              memory length: 185176
                                                        epsilon: 0.8313495400036612
                                                                                        steps: 171
                                                                                                       1r: 0.0001
                                                                                                                       evaluation 1
                score: 2.0
                                                        epsilon: 0.8309535400036698
episode: 1004
                              memory length: 185376
                                                                                        steps: 200
                                                                                                       lr: 0.0001
                                                                                                                       evaluation 1
episode: 1005
                score: 1.0
                              memory length: 185527
                                                        epsilon: 0.8306545600036763
                                                                                        steps: 151
                                                                                                       lr: 0.0001
                                                                                                                       evaluation 1
episode: 1006
                score: 0.0
                              memory length: 185651
                                                        epsilon: 0.8304090400036817
                                                                                        steps: 124
                                                                                                       1r: 0.0001
                                                                                                                       evaluation 1
                                                        epsilon: 0.830163520003687
episode: 1007
                score: 0.0
                              memory length: 185775
                                                                                       steps: 124
                                                                                                      lr: 0.0001
                                                                                                                      evaluation re
episode: 1008
                score: 0.0
                              memory length: 185898
                                                        epsilon: 0.8299199800036923
                                                                                        steps: 123
                                                                                                       lr: 0.0001
                                                                                                                       evaluation 1
                score: 0.0
                              memory length: 186021
                                                                                                       lr: 0.0001
episode: 1009
                                                        epsilon: 0.8296764400036976
                                                                                        steps: 123
                                                                                                                       evaluation 1
episode: 1010
                score: 1.0
                              memory length: 186190
                                                        epsilon: 0.8293418200037048
                                                                                        steps: 169
                                                                                                       lr: 0.0001
                                                                                                                       evaluation 1
```

```
episode: 1011
                score: 2.0
                              memory length: 186371
                                                       epsilon: 0.8289834400037126
                                                                                        steps: 181
                                                                                                       lr: 0.0001
                                                                                                                      evaluation 1
episode: 1012
                score: 1.0
                              memory length: 186541
                                                       epsilon: 0.8286468400037199
                                                                                        steps: 170
                                                                                                       lr: 0.0001
                                                                                                                      evaluation 1
                              memory length: 186761
episode: 1013
                score: 2.0
                                                       epsilon: 0.8282112400037294
                                                                                        steps: 220
                                                                                                       lr: 0.0001
                                                                                                                      evaluation 1
episode: 1014
                score: 2.0
                              memory length: 186959
                                                       epsilon: 0.8278192000037379
                                                                                        steps: 198
                                                                                                       lr: 0.0001
                                                                                                                      evaluation 1
episode: 1015
                score: 4.0
                              memory length: 187256
                                                       epsilon: 0.8272311400037506
                                                                                        steps: 297
                                                                                                       lr: 0.0001
                                                                                                                      evaluation 1
episode: 1016
                                                                                                       lr: 0.0001
                score: 3.0
                              memory length: 187505
                                                       epsilon: 0.8267381200037613
                                                                                        steps: 249
                                                                                                                      evaluation 1
episode: 1017
                                                       epsilon: 0.8264351800037679
                score: 1.0
                              memory length: 187658
                                                                                        steps: 153
                                                                                                      1r: 0.0001
                                                                                                                      evaluation 1
episode: 1018
                                                       epsilon: 0.8261342200037745
                                                                                                      lr: 0.0001
                score: 1.0
                              memory length: 187810
                                                                                        steps: 152
                                                                                                                      evaluation 1
episode: 1019
                score: 2.0
                              memory length: 188009
                                                       epsilon: 0.825740200003783
                                                                                       steps: 199
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
episode: 1020
                                                       epsilon: 0.8254966600037883
                                                                                                      1r: 0.0001
                score: 0.0
                              memory length: 188132
                                                                                        steps: 123
                                                                                                                      evaluation 1
episode: 1021
                score: 1.0
                              memory length: 188283
                                                       epsilon: 0.8251976800037948
                                                                                        steps: 151
                                                                                                       lr: 0.0001
                                                                                                                      evaluation 1
episode: 1022
                score: 1.0
                              memory length: 188456
                                                       epsilon: 0.8248551400038022
                                                                                        steps: 173
                                                                                                       lr: 0.0001
                                                                                                                      evaluation 1
episode: 1023
                score: 2.0
                              memory length: 188678
                                                       epsilon: 0.8244155800038118
                                                                                        steps: 222
                                                                                                       lr: 0.0001
                                                                                                                      evaluation 1
                                                       epsilon: 0.8241700600038171
episode: 1024
                score: 0.0
                              memory length: 188802
                                                                                        steps: 124
                                                                                                       lr: 0.0001
                                                                                                                      evaluation 1
episode: 1025
                score: 2.0
                              memory length: 189001
                                                       epsilon: 0.8237760400038256
                                                                                        steps: 199
                                                                                                       lr: 0.0001
                                                                                                                      evaluation 1
                score: 1.0
                                                                                        steps: 152
episode: 1026
                              memory length: 189153
                                                       epsilon: 0.8234750800038322
                                                                                                       lr: 0.0001
                                                                                                                      evaluation 1
episode: 1027
                                                                                                       lr: 0.0001
                score: 3.0
                              memory length: 189399
                                                       epsilon: 0.8229880000038428
                                                                                        steps: 246
                                                                                                                      evaluation 1
episode: 1028
                score: 3.0
                              memory length: 189648
                                                       epsilon: 0.8224949800038535
                                                                                        steps: 249
                                                                                                       lr: 0.0001
                                                                                                                      evaluation 1
episode: 1029
                score: 1.0
                              memory length: 189818
                                                       epsilon: 0.8221583800038608
                                                                                        steps: 170
                                                                                                       lr: 0.0001
                                                                                                                      evaluation 1
episode: 1030
                score: 3.0
                              memory length: 190050
                                                       epsilon: 0.8216990200038707
                                                                                        steps: 232
                                                                                                       lr: 0.0001
                                                                                                                      evaluation 1
episode: 1031
                score: 1.0
                              memory length: 190222
                                                       epsilon: 0.8213584600038781
                                                                                        steps: 172
                                                                                                      lr: 0.0001
                                                                                                                      evaluation 1
                                                                                                      lr: 0.0001
episode: 1032
                score: 3.0
                              memory length: 190451
                                                       epsilon: 0.820905040003888
                                                                                       steps: 229
                                                                                                                      evaluation re
                score: 0.0
                                                       epsilon: 0.8206595200038933
episode: 1033
                              memory length: 190575
                                                                                        steps: 124
                                                                                                      lr: 0.0001
                                                                                                                      evaluation 1
episode: 1034
                score: 2.0
                              memory length: 190793
                                                       epsilon: 0.8202278800039027
                                                                                        steps: 218
                                                                                                       1r: 0.0001
                                                                                                                      evaluation 1
                score: 1.0
                                                       epsilon: 0.8199289000039092
                                                                                                       lr: 0.0001
episode: 1035
                              memory length: 190944
                                                                                        steps: 151
                                                                                                                      evaluation 1
episode: 1036
                score: 1.0
                              memory length: 191115
                                                       epsilon: 0.8195903200039165
                                                                                        steps: 171
                                                                                                       lr: 0.0001
                                                                                                                      evaluation 1
                score: 0.0
                                                                                                       lr: 0.0001
episode: 1037
                              memory length: 191239
                                                       epsilon: 0.8193448000039218
                                                                                        steps: 124
                                                                                                                      evaluation 1
                              memory length: 191468
episode: 1038
                score: 3.0
                                                       epsilon: 0.8188913800039317
                                                                                        steps: 229
                                                                                                      lr: 0.0001
                                                                                                                      evaluation 1
episode: 1039
                score: 6.0
                              memory length: 191834
                                                       epsilon: 0.8181667000039474
                                                                                        steps: 366
                                                                                                       lr: 0.0001
                                                                                                                      evaluation 1
episode: 1040
                score: 3.0
                              memory length: 192085
                                                       epsilon: 0.8176697200039582
                                                                                        steps: 251
                                                                                                       lr: 0.0001
                                                                                                                      evaluation 1
episode: 1041
                                                                                                       lr: 0.0001
                score: 0.0
                              memory length: 192209
                                                       epsilon: 0.8174242000039635
                                                                                        steps: 124
                                                                                                                      evaluation 1
episode: 1042
                score: 2.0
                              memory length: 192408
                                                       epsilon: 0.8170301800039721
                                                                                        steps: 199
                                                                                                       lr: 0.0001
                                                                                                                      evaluation 1
episode: 1043
                score: 0.0
                              memory length: 192531
                                                       epsilon: 0.8167866400039774
                                                                                        steps: 123
                                                                                                       lr: 0.0001
                                                                                                                      evaluation 1
episode: 1044
                score: 0.0
                              memory length: 192655
                                                                                                      1r: 0.0001
                                                       epsilon: 0.8165411200039827
                                                                                        steps: 124
                                                                                                                      evaluation 1
                                                                                                      lr: 0.0001
episode: 1045
                score: 0.0
                              memory length: 192778
                                                       epsilon: 0.816297580003988
                                                                                       steps: 123
                                                                                                                     evaluation re
episode: 1046
                score: 0.0
                              memory length: 192901
                                                       epsilon: 0.8160540400039933
                                                                                        steps: 123
                                                                                                      lr: 0.0001
                                                                                                                      evaluation 1
                score: 2.0
episode: 1047
                              memory length: 193102
                                                       epsilon: 0.8156560600040019
                                                                                        steps: 201
                                                                                                      lr: 0.0001
                                                                                                                      evaluation 1
episode: 1048
                                                       epsilon: 0.8153214400040092
                score: 1.0
                              memory length: 193271
                                                                                        steps: 169
                                                                                                      lr: 0.0001
                                                                                                                      evaluation 1
                score: 0.0
                              memory length: 193395
                                                       epsilon: 0.8150759200040145
                                                                                                      lr: 0.0001
episode: 1049
                                                                                        steps: 124
                                                                                                                      evaluation 1
episode: 1050
                score: 2.0
                              memory length: 193615
                                                       epsilon: 0.814640320004024
                                                                                       steps: 220
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
                                                       epsilon: 0.8143948000040293
episode: 1051
                score: 0.0
                              memory length: 193739
                                                                                        steps: 124
                                                                                                      1r: 0.0001
                                                                                                                      evaluation 1
                                                                                                      lr: 0.0001
episode: 1052
                score: 1.0
                              memory length: 193891
                                                       epsilon: 0.8140938400040358
                                                                                        steps: 152
                                                                                                                      evaluation 1
episode: 1053
                score: 5.0
                              memory length: 194257
                                                       epsilon: 0.8133691600040516
                                                                                        steps: 366
                                                                                                       lr: 0.0001
                                                                                                                      evaluation 1
episode: 1054
                score: 1.0
                              memory length: 194409
                                                       epsilon: 0.8130682000040581
                                                                                        steps: 152
                                                                                                       lr: 0.0001
                                                                                                                      evaluation 1
episode: 1055
                                                       epsilon: 0.8127316000040654
                score: 1.0
                              memory length: 194579
                                                                                        steps: 170
                                                                                                      lr: 0.0001
                                                                                                                      evaluation 1
episode: 1056
                score: 2.0
                              memory length: 194780
                                                       epsilon: 0.812333620004074
                                                                                       steps: 201
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
episode: 1057
                score: 2.0
                              memory length: 194979
                                                       epsilon: 0.8119396000040826
                                                                                        steps: 199
                                                                                                      lr: 0.0001
                                                                                                                      evaluation 1
                                                                                        steps: 226
episode: 1058
                score: 3.0
                              memory length: 195205
                                                                                                       lr: 0.0001
                                                       epsilon: 0.8114921200040923
                                                                                                                      evaluation 1
episode: 1059
                score: 1.0
                              memory length: 195357
                                                       epsilon: 0.8111911600040989
                                                                                        steps: 152
                                                                                                       lr: 0.0001
                                                                                                                      evaluation 1
episode: 1060
                score: 2.0
                              memory length: 195556
                                                       epsilon: 0.8107971400041074
                                                                                        steps: 199
                                                                                                       lr: 0.0001
                                                                                                                      evaluation 1
                score: 0.0
                              memory length: 195680
                                                                                                       lr: 0.0001
episode: 1061
                                                       epsilon: 0.8105516200041127
                                                                                        steps: 124
                                                                                                                      evaluation 1
episode: 1062
                score: 0.0
                              memory length: 195804
                                                       epsilon: 0.8103061000041181
                                                                                        steps: 124
                                                                                                       lr: 0.0001
                                                                                                                      evaluation 1
episode: 1063
                score: 1.0
                              memory length: 195975
                                                       epsilon: 0.8099675200041254
                                                                                        steps: 171
                                                                                                       lr: 0.0001
                                                                                                                      evaluation 1
                              memory length: 196145
                                                                                                       lr: 0.0001
episode: 1064
                score: 1.0
                                                       epsilon: 0.8096309200041327
                                                                                        steps: 170
                                                                                                                      evaluation 1
episode: 1065
                                                       epsilon: 0.8090369200041456
                score: 4.0
                              memory length: 196445
                                                                                        steps: 300
                                                                                                       1r: 0.0001
                                                                                                                      evaluation a
episode: 1066
                score: 1.0
                              memory length: 196615
                                                       epsilon: 0.8087003200041529
                                                                                        steps: 170
                                                                                                       lr: 0.0001
                                                                                                                      evaluation 1
episode: 1067
                score: 0.0
                              memory length: 196739
                                                                                                       lr: 0.0001
                                                       epsilon: 0.8084548000041583
                                                                                        steps: 124
                                                                                                                      evaluation 1
                                                                                        steps: 153
episode: 1068
                score: 1.0
                              memory length: 196892
                                                       epsilon: 0.8081518600041648
                                                                                                       lr: 0.0001
                                                                                                                      evaluation 1
                              memory length: 197016
episode: 1069
                score: 0.0
                                                       epsilon: 0.8079063400041702
                                                                                        steps: 124
                                                                                                      lr: 0.0001
                                                                                                                      evaluation 1
episode: 1070
                score: 1.0
                              memory length: 197169
                                                       epsilon: 0.8076034000041767
                                                                                        steps: 153
                                                                                                       lr: 0.0001
                                                                                                                      evaluation 1
episode: 1071
                score: 1.0
                                                       epsilon: 0.8072628400041841
                                                                                                       lr: 0.0001
                              memory length: 197341
                                                                                        steps: 172
                                                                                                                      evaluation 1
episode: 1072
                score: 1.0
                              memory length: 197494
                                                       epsilon: 0.8069599000041907
                                                                                        steps: 153
                                                                                                       lr: 0.0001
                                                                                                                      evaluation 1
episode: 1073
                score: 2.0
                              memory length: 197694
                                                       epsilon: 0.8065639000041993
                                                                                        steps: 200
                                                                                                       lr: 0.0001
                                                                                                                      evaluation 1
episode: 1074
                score: 1.0
                              memory length: 197864
                                                       epsilon: 0.8062273000042066
                                                                                        steps: 170
                                                                                                       lr: 0.0001
                                                                                                                      evaluation 1
episode: 1075
                score: 0.0
                              memory length: 197988
                                                       epsilon: 0.805981780004212
                                                                                       steps: 124
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
episode: 1076
                              memory length: 198112
                score: 0.0
                                                       epsilon: 0.8057362600042173
                                                                                        steps: 124
                                                                                                      lr: 0.0001
                                                                                                                      evaluation 1
episode: 1077
                score: 0.0
                              memory length: 198236
                                                       epsilon: 0.8054907400042226
                                                                                        steps: 124
                                                                                                       lr: 0.0001
                                                                                                                      evaluation 1
episode: 1078
                score: 2.0
                              memory length: 198455
                                                       epsilon: 0.805057120004232
                                                                                       steps: 219
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
episode: 1079
                score: 0.0
                              memory length: 198579
                                                       epsilon: 0.8048116000042373
                                                                                        steps: 124
                                                                                                      lr: 0.0001
                                                                                                                      evaluation 1
                score: 0.0
episode: 1080
                              memory length: 198703
                                                       epsilon: 0.8045660800042427
                                                                                        steps: 124
                                                                                                      lr: 0.0001
                                                                                                                      evaluation 1
                score: 2.0
                              memory length: 198902
episode: 1081
                                                       epsilon: 0.8041720600042512
                                                                                                       lr: 0.0001
                                                                                        steps: 199
                                                                                                                      evaluation 1
                                                                                                       lr: 0.0001
episode: 1082
                score: 1.0
                              memory length: 199073
                                                       epsilon: 0.8038334800042586
                                                                                        steps: 171
                                                                                                                      evaluation a
episode: 1083
                score: 7.0
                              memory length: 199478
                                                       epsilon: 0.803031580004276
                                                                                       steps: 405
                                                                                                      lr: 0.0001
                                                                                                                     evaluation re
episode: 1084
                score: 2.0
                              memory length: 199678
                                                       epsilon: 0.8026355800042846
                                                                                        steps: 200
                                                                                                       lr: 0.0001
                                                                                                                      evaluation 1
episode: 1085
                score: 3.0
                              memory length: 199907
                                                       epsilon: 0.8021821600042944
                                                                                        steps: 229
                                                                                                      lr: 0.0001
                                                                                                                      evaluation 1
                                                       epsilon: 0.8017445800043039
episode: 1086
                score: 2.0
                              memory length: 200128
                                                                                        steps: 221
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
                score: 0.0
episode: 1087
                              memory length: 200252
                                                       epsilon: 0.8014990600043093
                                                                                        steps: 124
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
                score: 1.0
                                                                                        steps: 172
episode: 1088
                              memory length: 200424
                                                       epsilon: 0.8011585000043167
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
                                                                                                      1r: 4e-05
episode: 1089
                score: 1.0
                              memory length: 200595
                                                       epsilon: 0.800819920004324
                                                                                       steps: 171
                                                                                                                     evaluation rev
                score: 3.0
                                                       epsilon: 0.8003645200043339
                                                                                        steps: 230
                                                                                                                     evaluation re
episode: 1090
                              memory length: 200825
                                                                                                      lr: 4e-05
episode: 1091
                score: 0.0
                              memory length: 200948
                                                       epsilon: 0.8001209800043392
                                                                                        steps: 123
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
episode: 1092
                score: 3.0
                              memory length: 201175
                                                       ensilon: 0.7996715200043489
                                                                                        steps: 227
                                                                                                       1r: 4e-05
                                                                                                                     evaluation re
episode: 1093
                score: 3.0
                              memory length: 201421
                                                       epsilon: 0.7991844400043595
                                                                                        steps: 246
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
                                                       epsilon: 0.7988438800043669
                                                                                                       lr: 4e-05
episode: 1094
                score: 1.0
                              memory length: 201593
                                                                                        steps: 172
                                                                                                                     evaluation re
                                                                                                       lr: 4e-05
episode: 1095
                                                       epsilon: 0.7983924400043767
                score: 3.0
                              memory length: 201821
                                                                                        steps: 228
                                                                                                                     evaluation re
```

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episode: 1096
                score: 0.0
                              memory length: 201945
                                                       epsilon: 0.798146920004382
                                                                                       steps: 124
                                                                                                      lr: 4e-05
                                                                                                                    evaluation rev
                              memory length: 202069
episode: 1097
                score: 0.0
                                                       epsilon: 0.7979014000043874
                                                                                        steps: 124
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1098
                score: 0.0
                              memory length: 202192
                                                       epsilon: 0.7976578600043926
                                                                                        steps: 123
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
episode: 1099
                score: 1.0
                              memory length: 202362
                                                       epsilon: 0.7973212600044
                                                                                     steps: 170
                                                                                                    lr: 4e-05
                                                                                                                  evaluation rewar
                                                                                        steps: 289
                                                                                                       lr: 4e-05
episode: 1100
                score: 5.0
                              memory length: 202651
                                                       epsilon: 0.7967490400044124
                                                                                                                     evaluation re
episode: 1101
                score: 2.0
                              memory length: 202850
                                                       epsilon: 0.7963550200044209
                                                                                        steps: 199
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
episode: 1102
                score: 0.0
                              memory length: 202974
                                                       epsilon: 0.7961095000044263
                                                                                        steps: 124
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
episode: 1103
                                                       epsilon: 0.7957154800044348
                score: 2.0
                              memory length: 203173
                                                                                        steps: 199
                                                                                                      1r: 4e-05
                                                                                                                     evaluation re
                score: 4.0
                              memory length: 203470
                                                                                        steps: 297
episode: 1104
                                                       epsilon: 0.7951274200044476
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
episode: 1105
                score: 2.0
                              memory length: 203651
                                                       epsilon: 0.7947690400044554
                                                                                        steps: 181
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
episode: 1106
                score: 0.0
                              memory length: 203774
                                                       ensilon: 0.7945255000044606
                                                                                                      1r: 4e-05
                                                                                        steps: 123
                                                                                                                     evaluation re
                              memory length: 203973
                                                       epsilon: 0.7941314800044692
episode: 1107
                score: 2.0
                                                                                        steps: 199
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1108
                score: 3.0
                              memory length: 204202
                                                       epsilon: 0.793678060004479
                                                                                       steps: 229
                                                                                                      lr: 4e-05
                                                                                                                    evaluation rev
episode: 1109
                score: 2.0
                              memory length: 204401
                                                       epsilon: 0.7932840400044876
                                                                                        steps: 199
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1110
                score: 3.0
                              memory length: 204627
                                                       epsilon: 0.7928365600044973
                                                                                        steps: 226
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
                              memory length: 204750
episode: 1111
                score: 0.0
                                                       epsilon: 0.7925930200045026
                                                                                        steps: 123
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1112
                score: 2.0
                              memory length: 204968
                                                       epsilon: 0.792161380004512
                                                                                       steps: 218
                                                                                                      lr: 4e-05
                                                                                                                    evaluation rev
episode: 1113
                score: 6.0
                              memory length: 205339
                                                       epsilon: 0.7914268000045279
                                                                                                      lr: 4e-05
                                                                                        steps: 371
                                                                                                                     evaluation re
episode: 1114
                score: 1.0
                              memory length: 205490
                                                       epsilon: 0.7911278200045344
                                                                                        steps: 151
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
episode: 1115
                score: 1.0
                              memory length: 205660
                                                       epsilon: 0.7907912200045417
                                                                                        steps: 170
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
episode: 1116
                              memory length: 206048
                                                       epsilon: 0.7900229800045584
                                                                                                       lr: 4e-05
                score: 7.0
                                                                                        steps: 388
                                                                                                                     evaluation re
episode: 1117
                score: 1.0
                              memory length: 206199
                                                       epsilon: 0.7897240000045649
                                                                                        steps: 151
                                                                                                       1r: 4e-05
                                                                                                                     evaluation re
episode: 1118
                score: 0.0
                              memory length: 206323
                                                       epsilon: 0.7894784800045702
                                                                                        steps: 124
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
episode: 1119
                score: 0.0
                              memory length: 206447
                                                       epsilon: 0.7892329600045755
                                                                                        steps: 124
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
                                                       epsilon: 0.7886845000045875
episode: 1120
                score: 4.0
                              memory length: 206724
                                                                                        steps: 277
                                                                                                       1r: 4e-05
                                                                                                                     evaluation re
episode: 1121
                score: 1.0
                              memory length: 206894
                                                       epsilon: 0.7883479000045948
                                                                                        steps: 170
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
episode: 1122
                score: 2.0
                              memory length: 207092
                                                       epsilon: 0.7879558600046033
                                                                                        steps: 198
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
episode: 1123
                score: 1.0
                              memory length: 207265
                                                       epsilon: 0.7876133200046107
                                                                                        steps: 173
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
                              memory length: 207435
episode: 1124
                score: 1.0
                                                       epsilon: 0.787276720004618
                                                                                       steps: 170
                                                                                                      lr: 4e-05
                                                                                                                    evaluation rev
episode: 1125
                score: 2.0
                              memory
                                     length: 207634
                                                       epsilon: 0.7868827000046266
                                                                                        steps: 199
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
                                                       epsilon: 0.7865461000046339
episode: 1126
                score: 1.0
                              memory length: 207804
                                                                                        steps: 170
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
episode: 1127
                score: 2.0
                              memory length: 208003
                                                       epsilon: 0.7861520800046424
                                                                                        steps: 199
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
episode: 1128
                              memory length: 208222
                score: 2.0
                                                       epsilon: 0.7857184600046518
                                                                                        steps: 219
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
episode: 1129
                score: 0.0
                              memory length: 208346
                                                       epsilon: 0.7854729400046572
                                                                                        steps: 124
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
episode: 1130
                score: 0.0
                              memory length: 208469
                                                       epsilon: 0.7852294000046625
                                                                                        steps: 123
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
episode: 1131
                score: 2.0
                              memory length: 208689
                                                       epsilon: 0.7847938000046719
                                                                                        steps: 220
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
                                                                                        steps: 299
episode: 1132
                score: 4.0
                              memory length: 208988
                                                       epsilon: 0.7842017800046848
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
                score: 0.0
episode: 1133
                              memory length: 209112
                                                       epsilon: 0.7839562600046901
                                                                                        steps: 124
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
episode: 1134
                score: 0.0
                              memory length: 209236
                                                       ensilon: 0.7837107400046954
                                                                                        steps: 124
                                                                                                       1r: 4e-05
                                                                                                                     evaluation re
episode: 1135
                score: 2.0
                              memory length: 209434
                                                       epsilon: 0.7833187000047039
                                                                                        steps: 198
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
episode: 1136
                score: 1.0
                              memory length: 209604
                                                       epsilon: 0.7829821000047112
                                                                                        steps: 170
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
episode: 1137
                score: 2.0
                                                       epsilon: 0.7825484800047207
                              memory length: 209823
                                                                                        steps: 219
                                                                                                       1r: 4e-05
                                                                                                                     evaluation re
episode: 1138
                score: 4.0
                              memory length: 210099
                                                       epsilon: 0.7820020000047325
                                                                                        steps: 276
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1139
                score: 3.0
                              memory length: 210344
                                                       epsilon: 0.781516900004743
                                                                                       steps: 245
                                                                                                      lr: 4e-05
                                                                                                                    evaluation rev
episode: 1140
                score: 0.0
                              memory length: 210468
                                                       epsilon: 0.7812713800047484
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
                                                                                        steps: 124
episode: 1141
                score: 2.0
                              memory length: 210668
                                                       epsilon: 0.780875380004757
                                                                                       steps: 200
                                                                                                      lr: 4e-05
                                                                                                                    evaluation rev
episode: 1142
                score: 0.0
                              memory length: 210792
                                                       epsilon: 0.7806298600047623
                                                                                        steps: 124
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
                                                                                        steps: 124
episode: 1143
                score: 0.0
                              memory length: 210916
                                                       epsilon: 0.7803843400047676
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
                score: 0.0
episode: 1144
                              memory length: 211040
                                                       epsilon: 0.780138820004773
                                                                                       steps: 124
                                                                                                      lr: 4e-05
                                                                                                                    evaluation rev
episode: 1145
                score: 0.0
                              memory length: 211163
                                                       epsilon: 0.7798952800047783
                                                                                        steps: 123
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1146
                score: 1.0
                              memory length: 211334
                                                       epsilon: 0.7795567000047856
                                                                                        steps: 171
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
                score: 0.0
                              memory length: 211457
                                                                                                       lr: 4e-05
episode: 1147
                                                       epsilon: 0.7793131600047909
                                                                                        steps: 123
                                                                                                                     evaluation re
episode: 1148
                score: 2.0
                              memory length: 211656
                                                       epsilon: 0.7789191400047994
                                                                                        steps: 199
                                                                                                      1r: 4e-05
                                                                                                                     evaluation re
episode: 1149
                score: 1.0
                              memory length: 211827
                                                       epsilon: 0.7785805600048068
                                                                                                       lr: 4e-05
                                                                                        steps: 171
                                                                                                                     evaluation re
episode: 1150
                score: 2.0
                              memory length: 212025
                                                       epsilon: 0.7781885200048153
                                                                                        steps: 198
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
episode: 1151
                                                                                                      1r: 4e-05
                score: 3.0
                              memory length: 212274
                                                       ensilon: 0.777695500004826
                                                                                       steps: 249
                                                                                                                    evaluation rev
                score: 2.0
episode: 1152
                              memory length: 212473
                                                       epsilon: 0.7773014800048346
                                                                                        steps: 199
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1153
                score: 4.0
                              memory length: 212762
                                                       epsilon: 0.776729260004847
                                                                                                      lr: 4e-05
                                                                                       steps: 289
                                                                                                                    evaluation rev
episode: 1154
                score: 2.0
                              memory length: 212960
                                                       epsilon: 0.7763372200048555
                                                                                        steps: 198
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1155
                                                       epsilon: 0.775897660004865
                score: 2.0
                              memory length: 213182
                                                                                       steps: 222
                                                                                                      lr: 4e-05
                                                                                                                    evaluation rev
episode: 1156
                score: 3.0
                              memory length: 213447
                                                       epsilon: 0.7753729600048764
                                                                                        steps: 265
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
episode: 1157
                score: 1.0
                              memory length: 213598
                                                       epsilon: 0.7750739800048829
                                                                                        steps: 151
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
                                                                                                       lr: 4e-05
episode: 1158
                score: 0.0
                              memory length: 213721
                                                       epsilon: 0.7748304400048882
                                                                                        steps: 123
                                                                                                                     evaluation re
episode: 1159
                score: 2.0
                              memory length: 213940
                                                       epsilon: 0.7743968200048976
                                                                                        steps: 219
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
episode: 1160
                score: 2.0
                              memory length: 214139
                                                       epsilon: 0.7740028000049062
                                                                                        steps: 199
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
episode: 1161
                score: 0.0
                              memory length: 214263
                                                       epsilon: 0.7737572800049115
                                                                                        steps: 124
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
episode: 1162
                score: 2.0
                              memory length: 214462
                                                       epsilon: 0.7733632600049201
                                                                                        steps: 199
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
episode: 1163
                score: 1.0
                              memory length: 214614
                                                       epsilon: 0.7730623000049266
                                                                                        steps: 152
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
                score: 0.0
episode: 1164
                              memory length: 214737
                                                       epsilon: 0.7728187600049319
                                                                                        steps: 123
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
episode: 1165
                score: 2.0
                              memory length: 214956
                                                       epsilon: 0.7723851400049413
                                                                                        steps: 219
                                                                                                       1r: 4e-05
                                                                                                                     evaluation re
episode: 1166
                score: 4.0
                              memory length: 215254
                                                       epsilon: 0.7717951000049541
                                                                                        steps: 298
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
episode: 1167
                score: 4.0
                              memory length: 215530
                                                       epsilon: 0.771248620004966
                                                                                       steps: 276
                                                                                                      lr: 4e-05
                                                                                                                    evaluation rev
episode: 1168
                score: 3.0
                              memory length: 215778
                                                       ensilon: 0.7707575800049766
                                                                                        steps: 248
                                                                                                      1r: 4e-05
                                                                                                                     evaluation re
episode: 1169
                score: 1.0
                              memory length: 215948
                                                       epsilon: 0.7704209800049839
                                                                                        steps: 170
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1170
                score: 2.0
                              memory length: 216147
                                                       epsilon: 0.7700269600049925
                                                                                        steps: 199
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
                score: 4.0
episode: 1171
                              memory length: 216421
                                                       epsilon: 0.7694844400050043
                                                                                        steps: 274
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
                                                       epsilon: 0.7692389200050096
episode: 1172
                score: 0.0
                              memory length: 216545
                                                                                        steps: 124
                                                                                                      1r: 4e-05
                                                                                                                     evaluation re
episode: 1173
                score: 2.0
                              memory length: 216764
                                                       epsilon: 0.768805300005019
                                                                                       steps: 219
                                                                                                      lr: 4e-05
                                                                                                                    evaluation rev
                score: 2.0
episode: 1174
                              memory length: 216983
                                                       epsilon: 0.7683716800050284
                                                                                        steps: 219
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1175
                              memory length: 217210
                                                       epsilon: 0.7679222200050382
                                                                                                      lr: 4e-05
                score: 3.0
                                                                                        steps: 227
                                                                                                                     evaluation re
                score: 2.0
episode: 1176
                              memory length: 217408
                                                       epsilon: 0.7675301800050467
                                                                                        steps: 198
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1177
                score: 0.0
                              memory length: 217532
                                                       epsilon: 0.767284660005052
                                                                                       steps: 124
                                                                                                      lr: 4e-05
                                                                                                                    evaluation rev
episode: 1178
                              memory length: 217800
                score: 3.0
                                                       epsilon: 0.7667540200050635
                                                                                        steps: 268
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1179
                score: 1.0
                              memory length: 217970
                                                       epsilon: 0.7664174200050708
                                                                                        steps: 170
                                                                                                       1r: 4e-05
                                                                                                                     evaluation re
episode: 1180
                score: 0.0
                              memory length: 218094
                                                       epsilon: 0.7661719000050762
                                                                                        steps: 124
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
```

```
score: 4.0
                                                       epsilon: 0.7656214600050881
                                                                                        steps: 278
episode: 1181
                              memory length: 218372
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1182
                score: 0.0
                              memory length: 218495
                                                       epsilon: 0.7653779200050934
                                                                                        steps: 123
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
                                                       epsilon: 0.7651324000050987
episode: 1183
                score: 0.0
                              memory length: 218619
                                                                                        steps: 124
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1184
                score: 1.0
                              memory length: 218770
                                                       epsilon: 0.7648334200051052
                                                                                        steps: 151
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1185
                score: 3.0
                              memory length: 219002
                                                       epsilon: 0.7643740600051152
                                                                                        steps: 232
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1186
                score: 4.0
                              memory length: 219319
                                                       epsilon: 0.7637464000051288
                                                                                        steps: 317
                                                                                                      1r: 4e-05
                                                                                                                     evaluation re
                                                       epsilon: 0.7633523800051374
                                                                                                      lr: 4e-05
episode: 1187
                score: 2.0
                              memory length: 219518
                                                                                        steps: 199
                                                                                                                     evaluation re
                score: 1.0
episode: 1188
                              memory length: 219670
                                                       epsilon: 0.7630514200051439
                                                                                        steps: 152
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
                score: 0.0
                                                                                                      lr: 4e-05
episode: 1189
                              memory length: 219794
                                                       epsilon: 0.7628059000051493
                                                                                        steps: 124
                                                                                                                     evaluation re
episode: 1190
                score: 1.0
                              memory length: 219946
                                                       epsilon: 0.7625049400051558
                                                                                        steps: 152
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1191
                score: 1.0
                              memory length: 220116
                                                       epsilon: 0.7621683400051631
                                                                                        steps: 170
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1192
                score: 0.0
                              memory length: 220239
                                                       ensilon: 0.7619248000051684
                                                                                                      1r: 4e-05
                                                                                        steps: 123
                                                                                                                     evaluation re
                                                       epsilon: 0.7615822600051758
episode: 1193
                score: 1.0
                              memory length: 220412
                                                                                        steps: 173
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1194
                score: 0.0
                              memory length: 220536
                                                       epsilon: 0.7613367400051811
                                                                                        steps: 124
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1195
                score: 1.0
                              memory length: 220706
                                                       epsilon: 0.7610001400051885
                                                                                        steps: 170
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1196
                                                       epsilon: 0.7606635400051958
                score: 1.0
                              memory length: 220876
                                                                                        steps: 170
                                                                                                      1r: 4e-05
                                                                                                                     evaluation re
                              memory length: 221000
episode: 1197
                score: 0.0
                                                       epsilon: 0.7604180200052011
                                                                                        steps: 124
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1198
                score: 4.0
                              memory length: 221278
                                                       epsilon: 0.759867580005213
                                                                                       steps: 278
                                                                                                     lr: 4e-05
                                                                                                                    evaluation rev
episode: 1199
                score: 0.0
                              memory length: 221402
                                                       epsilon: 0.7596220600052184
                                                                                        steps: 124
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1200
                score: 0.0
                              memory length: 221526
                                                       epsilon: 0.7593765400052237
                                                                                        steps: 124
                                                                                                      1r: 4e-05
                                                                                                                     evaluation re
episode: 1201
                score: 1.0
                              memory length: 221678
                                                       epsilon: 0.7590755800052302
                                                                                        steps: 152
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1202
                score: 0.0
                              memory length: 221801
                                                       epsilon: 0.7588320400052355
                                                                                        steps: 123
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1203
                score: 2.0
                                                       epsilon: 0.7584380200052441
                                                                                                      lr: 4e-05
                              memory length: 222000
                                                                                        steps: 199
                                                                                                                     evaluation re
episode: 1204
                score: 2.0
                              memory length: 222200
                                                       epsilon: 0.7580420200052527
                                                                                        steps: 200
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1205
                score: 0.0
                              memory length: 222324
                                                       epsilon: 0.757796500005258
                                                                                       steps: 124
                                                                                                     lr: 4e-05
                                                                                                                    evaluation rev
                                                       epsilon: 0.7573628800052674
episode: 1206
                score: 2.0
                              memory length: 222543
                                                                                        steps: 219
                                                                                                      1r: 4e-05
                                                                                                                     evaluation re
                score: 2.0
                                                       epsilon: 0.7569708400052759
episode: 1207
                              memory length: 222741
                                                                                        steps: 198
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1208
                score: 0.0
                              memory length: 222865
                                                       epsilon: 0.7567253200052813
                                                                                        steps: 124
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1209
                score: 2.0
                              memory length: 223064
                                                       epsilon: 0.7563313000052898
                                                                                        steps: 199
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1210
                                                       epsilon: 0.7558818400052996
                score: 3.0
                              memory length: 223291
                                                                                        steps: 227
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1211
                score: 0.0
                              memory length: 223415
                                                       epsilon: 0.7556363200053049
                                                                                        steps: 124
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
                                                                                                      lr: 4e-05
                score: 0.0
                                                       epsilon: 0.7553908000053102
episode: 1212
                              memory length: 223539
                                                                                        steps: 124
                                                                                                                     evaluation re
episode: 1213
                              memory length: 223811
                                                                                                      lr: 4e-05
                score: 3.0
                                                       epsilon: 0.7548522400053219
                                                                                        steps: 272
                                                                                                                     evaluation re
                              memory length: 223981
episode: 1214
                score: 1.0
                                                       epsilon: 0.7545156400053292
                                                                                        steps: 170
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1215
                score: 0.0
                              memory length: 224104
                                                       epsilon: 0.7542721000053345
                                                                                        steps: 123
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1216
                score: 0.0
                              memory length: 224228
                                                       epsilon: 0.7540265800053398
                                                                                        steps: 124
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1217
                score: 2.0
                              memory length: 224427
                                                       epsilon: 0.7536325600053484
                                                                                        steps: 199
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1218
                score: 2.0
                              memory length: 224626
                                                       epsilon: 0.753238540005357
                                                                                       steps: 199
                                                                                                     lr: 4e-05
                                                                                                                    evaluation rev
                score: 3.0
episode: 1219
                              memory length: 224893
                                                       epsilon: 0.7527098800053684
                                                                                        steps: 267
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1220
                score: 0.0
                              memory length: 225017
                                                       epsilon: 0.7524643600053738
                                                                                        steps: 124
                                                                                                      1r: 4e-05
                                                                                                                     evaluation re
episode: 1221
                score: 2.0
                              memory length: 225238
                                                       epsilon: 0.7520267800053833
                                                                                                      lr: 4e-05
                                                                                        steps: 221
                                                                                                                     evaluation re
episode: 1222
                score: 1.0
                              memory length: 225389
                                                       epsilon: 0.7517278000053897
                                                                                        steps: 151
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1223
                score: 2.0
                              memory length: 225588
                                                       ensilon: 0.7513337800053983
                                                                                        steps: 199
                                                                                                      1r: 4e-05
                                                                                                                     evaluation re
episode: 1224
                                                       epsilon: 0.7510882600054036
                score: 0.0
                              memory length: 225712
                                                                                        steps: 124
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1225
                score: 0.0
                              memory length: 225836
                                                       epsilon: 0.750842740005409
                                                                                       steps: 124
                                                                                                     lr: 4e-05
                                                                                                                    evaluation rev
episode: 1226
                score: 0.0
                              memory length: 225960
                                                       epsilon: 0.7505972200054143
                                                                                        steps: 124
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1227
                                                       epsilon: 0.7503517000054196
                score: 0.0
                              memory length: 226084
                                                                                        steps: 124
                                                                                                      1r: 4e-05
                                                                                                                     evaluation re
                              memory length: 226378
episode: 1228
                score: 4.0
                                                       epsilon: 0.7497695800054323
                                                                                        steps: 294
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1229
                score: 2.0
                              memory length: 226576
                                                       epsilon: 0.7493775400054408
                                                                                        steps: 198
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1230
                score: 0.0
                              memory length: 226699
                                                       epsilon: 0.749134000005446
                                                                                       steps: 123
                                                                                                     1r: 4e-05
                                                                                                                    evaluation rev
                              memory length: 226900
episode: 1231
                score: 2.0
                                                       epsilon: 0.7487360200054547
                                                                                        steps: 201
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1232
                score: 2.0
                              memory length: 227099
                                                       epsilon: 0.7483420000054632
                                                                                        steps: 199
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
                score: 1.0
episode: 1233
                              memory length: 227251
                                                       epsilon: 0.7480410400054698
                                                                                        steps: 152
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1234
                score: 1.0
                              memory length: 227421
                                                       epsilon: 0.7477044400054771
                                                                                        steps: 170
                                                                                                      1r: 4e-05
                                                                                                                     evaluation re
episode: 1235
                score: 4.0
                              memory length: 227681
                                                       epsilon: 0.7471896400054883
                                                                                        steps: 260
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1236
                score: 3.0
                              memory length: 227908
                                                       epsilon: 0.746740180005498
                                                                                       steps: 227
                                                                                                     lr: 4e-05
                                                                                                                    evaluation rev
episode: 1237
                                                       ensilon: 0.7464016000055054
                score: 1.0
                              memory length: 228079
                                                                                        steps: 171
                                                                                                      1r: 4e-05
                                                                                                                     evaluation re
                                                       epsilon: 0.7459739200055147
episode: 1238
                              memory length: 228295
                                                                                        steps: 216
                                                                                                      lr: 4e-05
                score: 2.0
                                                                                                                     evaluation re
episode: 1239
                score: 3.0
                              memory length: 228524
                                                       epsilon: 0.7455205000055245
                                                                                        steps: 229
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1240
                score: 3.0
                              memory length: 228773
                                                       epsilon: 0.7450274800055352
                                                                                        steps: 249
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1241
                                                       epsilon: 0.7447819600055405
                score: 0.0
                              memory length: 228897
                                                                                        steps: 124
                                                                                                      1r: 4e-05
                                                                                                                     evaluation re
episode: 1242
                score: 3.0
                              memory length: 229145
                                                       epsilon: 0.7442909200055512
                                                                                        steps: 248
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1243
                score: 0.0
                              memory length: 229269
                                                       epsilon: 0.7440454000055565
                                                                                        steps: 124
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1244
                                                                                                      lr: 4e-05
                score: 1.0
                              memory length: 229439
                                                       epsilon: 0.7437088000055638
                                                                                        steps: 170
                                                                                                                     evaluation re
                score: 2.0
episode: 1245
                              memory length: 229661
                                                       epsilon: 0.7432692400055734
                                                                                        steps: 222
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1246
                score: 4.0
                              memory length: 229957
                                                       epsilon: 0.7426831600055861
                                                                                        steps: 296
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1247
                score: 2.0
                              memory length: 230156
                                                       epsilon: 0.7422891400055946
                                                                                        steps: 199
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
                              memory length: 230403
episode: 1248
                score: 3.0
                                                       epsilon: 0.7418000800056053
                                                                                        steps: 247
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1249
                score: 3.0
                              memory length: 230629
                                                       epsilon: 0.741352600005615
                                                                                       steps: 226
                                                                                                     lr: 4e-05
                                                                                                                    evaluation rev
                score: 1.0
episode: 1250
                              memory length: 230781
                                                       epsilon: 0.7410516400056215
                                                                                        steps: 152
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
                                                       epsilon: 0.7408061200056268
episode: 1251
                score: 0.0
                              memory length: 230905
                                                                                        steps: 124
                                                                                                      1r: 4e-05
                                                                                                                     evaluation re
episode: 1252
                score: 0.0
                              memory length: 231029
                                                       epsilon: 0.7405606000056322
                                                                                        steps: 124
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1253
                score: 3.0
                              memory length: 231276
                                                       epsilon: 0.7400715400056428
                                                                                        steps: 247
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1254
                              memory length: 231524
                                                                                                      1r: 4e-05
                score: 3.0
                                                       ensilon: 0.7395805000056535
                                                                                        steps: 248
                                                                                                                     evaluation re
                              memory length: 231648
episode: 1255
                score: 0.0
                                                       epsilon: 0.7393349800056588
                                                                                        steps: 124
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1256
                score: 2.0
                              memory length: 231847
                                                       epsilon: 0.7389409600056673
                                                                                        steps: 199
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1257
                score: 2.0
                              memory length: 232045
                                                       epsilon: 0.7385489200056758
                                                                                        steps: 198
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1258
                score: 4.0
                              memory length: 232360
                                                       epsilon: 0.7379252200056894
                                                                                        steps: 315
                                                                                                      1r: 4e-05
                                                                                                                     evaluation re
                                                       epsilon: 0.7374935800056988
                score: 2.0
                                                                                                      lr: 4e-05
episode: 1259
                              memory length: 232578
                                                                                        steps: 218
                                                                                                                     evaluation re
                score: 0.0
                                                                                       steps: 123
episode: 1260
                              memory length: 232701
                                                       epsilon: 0.737250040005704
                                                                                                     lr: 4e-05
                                                                                                                    evaluation rev
episode: 1261
                score: 2.0
                              memory length: 232900
                                                       epsilon: 0.7368560200057126
                                                                                        steps: 199
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
                score: 1.0
                                                       epsilon: 0.7365194200057199
episode: 1262
                              memory length: 233070
                                                                                        steps: 170
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1263
                score: 1.0
                              memory length: 233241
                                                       epsilon: 0.7361808400057273
                                                                                        steps: 171
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
                                                       epsilon: 0.7357868200057358
episode: 1264
                              memory length: 233440
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
                score: 2.0
                                                                                        steps: 199
                                                                                                      1r. 40 05
enisode: 1265
                score: 4 0
                              memory length: 233718
                                                       encilon. N 73523638NNN57478
                                                                                        ctonc. 278
                                                                                                                     evaluation re
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SCOLE: 4.0
                              memory rength: 233/10
episoue: 1200
                                                       ebatton: 0.12272020000021410
                                                                                        sceps: 2/0
                                                                                                       TT: 46-00
                                                                                                                      evaluation re
episode: 1266
                score: 2.0
                              memory length: 233937
                                                       epsilon: 0.7348027600057572
                                                                                        steps: 219
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1267
                score: 4.0
                              memory length: 234258
                                                       epsilon: 0.734167180005771
                                                                                       steps: 321
                                                                                                      lr: 4e-05
                                                                                                                     evaluation rev
episode: 1268
                score: 0.0
                              memory length: 234382
                                                       epsilon: 0.7339216600057763
                                                                                                       lr: 4e-05
                                                                                        steps: 124
                                                                                                                     evaluation re
                              memory length: 234601
                                                       epsilon: 0.7334880400057857
episode: 1269
                score: 2.0
                                                                                        steps: 219
                                                                                                       1r: 4e-05
                                                                                                                      evaluation re
episode: 1270
                score: 2.0
                              memory length: 234800
                                                       epsilon: 0.7330940200057943
                                                                                        steps: 199
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1271
                score: 2.0
                              memory length: 234999
                                                       epsilon: 0.732700000058028
                                                                                        steps: 199
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1272
                score: 1.0
                              memory length: 235151
                                                       epsilon: 0.7323990400058094
                                                                                        steps: 152
                                                                                                       1r: 4e-05
                                                                                                                     evaluation re
episode: 1273
                score: 0.0
                              memory length: 235275
                                                       epsilon: 0.7321535200058147
                                                                                        steps: 124
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
                score: 3.0
episode: 1274
                              memory length: 235521
                                                       epsilon: 0.7316664400058253
                                                                                        steps: 246
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1275
                score: 3.0
                              memory length: 235767
                                                       epsilon: 0.7311793600058358
                                                                                        steps: 246
                                                                                                       1r: 4e-05
                                                                                                                     evaluation re
                score: 1.0
                                                        epsilon: 0.7308368200058433
episode: 1276
                              memory length: 235940
                                                                                        steps: 173
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1277
                score: 0.0
                              memory length: 236063
                                                       epsilon: 0.7305932800058486
                                                                                        steps: 123
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
                score: 2.0
                                                                                                       lr: 4e-05
                                                       epsilon: 0.7302012400058571
episode: 1278
                              memory length: 236261
                                                                                        steps: 198
                                                                                                                     evaluation re
episode: 1279
                score: 4.0
                              memory length: 236553
                                                       epsilon: 0.7296230800058696
                                                                                        steps: 292
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
                                                                                                      lr: 4e-05
episode: 1280
                score: 3.0
                              memory length: 236819
                                                        epsilon: 0.729096400005881
                                                                                       steps: 266
                                                                                                                     evaluation rev
episode: 1281
                score: 1.0
                              memory length: 236971
                                                       epsilon: 0.7287954400058876
                                                                                        steps: 152
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
                                                        epsilon: 0.7284034000058961
episode: 1282
                score: 2.0
                              memory length: 237169
                                                                                        steps: 198
                                                                                                       1r: 4e-05
                                                                                                                      evaluation re
                              memory length: 237437
                                                       epsilon: 0.7278727600059076
episode: 1283
                score: 3.0
                                                                                        steps: 268
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1284
                score: 4.0
                              memory length: 237735
                                                       epsilon: 0.7272827200059204
                                                                                        steps: 298
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1285
                score: 2.0
                              memory length: 237934
                                                       epsilon: 0.726888700005929
                                                                                       steps: 199
                                                                                                      lr: 4e-05
                                                                                                                     evaluation rev
episode: 1286
                                                                                                                     evaluation re
                score: 0.0
                              memory length: 238058
                                                       epsilon: 0.7266431800059343
                                                                                        steps: 124
                                                                                                       1r: 4e-05
episode: 1287
                score: 2.0
                              memory length: 238277
                                                       epsilon: 0.7262095600059437
                                                                                        steps: 219
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
                score: 2.0
                                                                                        steps: 219
episode: 1288
                              memory length: 238496
                                                       epsilon: 0.7257759400059531
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
episode: 1289
                score: 4.0
                                                       epsilon: 0.725229460005965
                                                                                       steps: 276
                                                                                                      lr: 4e-05
                              memory length: 238772
                                                                                                                     evaluation rev
                score: 2.0
episode: 1290
                              memory length: 238991
                                                        epsilon: 0.7247958400059744
                                                                                        steps: 219
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1291
                score: 0.0
                              memory length: 239115
                                                       epsilon: 0.7245503200059797
                                                                                        steps: 124
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1292
                score: 3.0
                              memory length: 239342
                                                       epsilon: 0.7241008600059895
                                                                                        steps: 227
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
                                                       epsilon: 0.723706840005998
                score: 2.0
                                                                                                                    evaluation rev
episode: 1293
                              memory length: 239541
                                                                                       steps: 199
                                                                                                      lr: 4e-05
episode: 1294
                score: 2.0
                              memory
                                     length: 239740
                                                       epsilon: 0.7233128200060066
                                                                                        steps: 199
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1295
                score: 3.0
                              memory length: 239966
                                                       epsilon: 0.7228653400060163
                                                                                        steps: 226
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
                              memory length: 240186
episode: 1296
                score: 2.0
                                                       epsilon: 0.7224297400060258
                                                                                        steps: 220
                                                                                                       1r: 4e-05
                                                                                                                      evaluation re
episode: 1297
                score: 2.0
                                     length: 240371
                                                       epsilon: 0.7220634400060337
                                                                                        steps: 185
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
                                                       epsilon: 0.7215347800060452
episode: 1298
                score: 3.0
                              memory length: 240638
                                                                                        steps: 267
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
episode: 1299
                              memory length: 240883
                                                       epsilon: 0.7210496800060557
                                                                                        steps: 245
                                                                                                       lr: 4e-05
                score: 3.0
                                                                                                                     evaluation re
                              memory length: 241081
episode: 1300
                                                       epsilon: 0.7206576400060642
                score: 2.0
                                                                                        steps: 198
                                                                                                       1r: 4e-05
                                                                                                                      evaluation re
episode: 1301
                score: 0.0
                              memory length: 241205
                                                       epsilon: 0.7204121200060696
                                                                                        steps: 124
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
                score: 5.0
                                                                                                       lr: 4e-05
episode: 1302
                              memory length: 241531
                                                       epsilon: 0.7197666400060836
                                                                                        steps: 326
                                                                                                                      evaluation re
episode: 1303
                score: 5.0
                              memory length: 241861
                                                       epsilon: 0.7191132400060978
                                                                                        steps: 330
                                                                                                       1r: 4e-05
                                                                                                                     evaluation re
episode: 1304
                score: 1.0
                              memory length: 242031
                                                        epsilon: 0.7187766400061051
                                                                                        steps: 170
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1305
                score: 3.0
                              memory length: 242301
                                                       epsilon: 0.7182420400061167
                                                                                        steps: 270
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1306
                score: 3.0
                              memory length: 242571
                                                       ensilon: 0.7177074400061283
                                                                                        steps: 270
                                                                                                       1r: 4e-05
                                                                                                                     evaluation re
episode: 1307
                score: 2.0
                              memory length: 242788
                                                        epsilon: 0.7172777800061376
                                                                                        steps: 217
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1308
                score: 2.0
                              memory length: 243007
                                                       epsilon: 0.716844160006147
                                                                                       steps: 219
                                                                                                      lr: 4e-05
                                                                                                                     evaluation rev
episode: 1309
                score: 0.0
                              memory length: 243131
                                                       ensilon: 0.7165986400061524
                                                                                        steps: 124
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
                                                        epsilon: 0.7163531200061577
episode: 1310
                score: 0.0
                              memory length: 243255
                                                                                        steps: 124
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1311
                score: 3.0
                              memory length: 243503
                                                       epsilon: 0.7158620800061684
                                                                                        steps: 248
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
                                                                                                       lr: 4e-05
episode: 1312
                score: 2.0
                              memory length: 243721
                                                       epsilon: 0.7154304400061777
                                                                                        steps: 218
                                                                                                                     evaluation re
episode: 1313
                score: 3.0
                              memory length: 243948
                                                       epsilon: 0.7149809800061875
                                                                                        steps: 227
                                                                                                       1r: 4e-05
                                                                                                                      evaluation re
                              memory length: 244167
                                                       epsilon: 0.7145473600061969
episode: 1314
                score: 2.0
                                                                                        steps: 219
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1315
                score: 9.0
                              memory length: 244535
                                                       epsilon: 0.7138187200062127
                                                                                        steps: 368
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
episode: 1316
                score: 0.0
                              memory length: 244659
                                                       epsilon: 0.713573200006218
                                                                                       steps: 124
                                                                                                      lr: 4e-05
                                                                                                                     evaluation rev
episode: 1317
                score: 2.0
                              memory length: 244859
                                                       epsilon: 0.7131772000062266
                                                                                        steps: 200
                                                                                                       1r: 4e-05
                                                                                                                     evaluation re
episode: 1318
                score: 2.0
                              memory length: 245058
                                                       epsilon: 0.7127831800062352
                                                                                        steps: 199
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
                score: 0.0
episode: 1319
                              memory length: 245181
                                                       epsilon: 0.7125396400062405
                                                                                                       lr: 4e-05
                                                                                        steps: 123
                                                                                                                     evaluation re
                                                       epsilon: 0.712147600006249
episode: 1320
                score: 2.0
                              memory length: 245379
                                                                                       steps: 198
                                                                                                      1r: 4e-05
                                                                                                                     evaluation rev
                score: 2.0
episode: 1321
                              memory length: 245577
                                                        epsilon: 0.7117555600062575
                                                                                                       lr: 4e-05
                                                                                        steps: 198
                                                                                                                      evaluation re
episode: 1322
                score: 2.0
                              memory length: 245776
                                                       epsilon: 0.7113615400062661
                                                                                        steps: 199
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1323
                score: 4.0
                                                       ensilon: 0.7107378400062796
                                                                                                       1r: 4e-05
                              memory length: 246091
                                                                                        steps: 315
                                                                                                                     evaluation re
                score: 2.0
                                                        epsilon: 0.7103438200062882
episode: 1324
                              memory length: 246290
                                                                                        steps: 199
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1325
                score: 4.0
                              memory
                                     length: 246567
                                                       epsilon: 0.7097953600063001
                                                                                        steps: 277
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1326
                score: 3.0
                              memory length: 246817
                                                       epsilon: 0.7093003600063108
                                                                                        steps: 250
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
episode: 1327
                                                       epsilon: 0.7088667400063202
                score: 2.0
                              memory length: 247036
                                                                                        steps: 219
                                                                                                       1r: 4e-05
                                                                                                                      evaluation re
                score: 5.0
episode: 1328
                              memory length: 247352
                                                        epsilon: 0.7082410600063338
                                                                                        steps: 316
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
                score: 2.0
episode: 1329
                              memory length: 247551
                                                       epsilon: 0.7078470400063424
                                                                                        steps: 199
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
episode: 1330
                                                       epsilon: 0.7073995600063521
                                                                                                       1r: 4e-05
                score: 3.0
                              memory length: 247777
                                                                                        steps: 226
                                                                                                                      evaluation re
                              memory length: 247996
                                                       epsilon: 0.7069659400063615
episode: 1331
                score: 2.0
                                                                                        steps: 219
                                                                                                       1r: 4e-05
                                                                                                                      evaluation re
episode: 1332
                score: 3.0
                              memory length: 248224
                                                       epsilon: 0.7065145000063713
                                                                                        steps: 228
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1333
                              memory length: 248376
                                                       epsilon: 0.7062135400063778
                                                                                                       lr: 4e-05
                score: 1.0
                                                                                        steps: 152
                                                                                                                     evaluation re
                              memory length: 248575
episode: 1334
                score: 2.0
                                                       epsilon: 0.7058195200063864
                                                                                        steps: 199
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1335
                score: 2.0
                              memory length: 248774
                                                       epsilon: 0.7054255000063949
                                                                                        steps: 199
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1336
                score: 1.0
                              memory length: 248946
                                                       epsilon: 0.7050849400064023
                                                                                        steps: 172
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
                                                       epsilon: 0.7046909200064109
episode: 1337
                score: 2.0
                              memory length: 249145
                                                                                        steps: 199
                                                                                                       1r: 4e-05
                                                                                                                     evaluation re
                score: 0.0
                                                        epsilon: 0.7044454000064162
episode: 1338
                              memory length: 249269
                                                                                        steps: 124
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1339
                score: 0.0
                              memory length: 249392
                                                       epsilon: 0.7042018600064215
                                                                                        steps: 123
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1340
                score: 1.0
                              memory length: 249562
                                                       epsilon: 0.7038652600064288
                                                                                        steps: 170
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
                              memory length: 249860
episode: 1341
                                                       epsilon: 0.7032752200064416
                score: 4.0
                                                                                        steps: 298
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
episode: 1342
                score: 2.0
                              memory length: 250079
                                                       epsilon: 0.702841600006451
                                                                                       steps: 219
                                                                                                      lr: 4e-05
                                                                                                                     evaluation rev
                                                       epsilon: 0.7025406400064576
episode: 1343
                score: 1.0
                              memory length: 250231
                                                                                        steps: 152
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
                                                       epsilon: 0.7021466200064661
episode: 1344
                score: 2.0
                              memory length: 250430
                                                                                        steps: 199
                                                                                                       1r: 4e-05
                                                                                                                      evaluation re
                                                                                                       lr: 4e-05
episode: 1345
                score: 3.0
                              memory length: 250678
                                                       epsilon: 0.7016555800064768
                                                                                        steps: 248
                                                                                                                      evaluation re
episode: 1346
                score: 1.0
                              memory length: 250830
                                                       epsilon: 0.7013546200064833
                                                                                        steps: 152
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
episode: 1347
                                                       epsilon: 0.700905160006493
                                                                                       steps: 227
                                                                                                      lr: 4e-05
                score: 3.0
                              memory length: 251057
                                                                                                                     evaluation rev
episode: 1348
                score: 2.0
                              memory length: 251256
                                                       epsilon: 0.7005111400065016
                                                                                        steps: 199
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1349
                score: 0.0
                              memory length: 251380
                                                       epsilon: 0.7002656200065069
                                                                                        steps: 124
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
```

```
score: 0.0
                                                       epsilon: 0.7000201000065123
                                                                                        steps: 124
episode: 1350
                              memory length: 251504
                                                                                                       1r: 4e-05
                                                                                                                      evaluation re
episode: 1351
                score: 4.0
                              memory length: 251783
                                                        epsilon: 0.6994676800065243
                                                                                        steps: 279
                                                                                                       1r: 4e-05
                                                                                                                      evaluation re
episode: 1352
                score: 2.0
                                                        epsilon: 0.6990736600065328
                              memory
                                     length: 251982
                                                                                        steps: 199
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1353
                score: 2.0
                              memory length: 252201
                                                        epsilon: 0.6986400400065422
                                                                                        steps: 219
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
                                                                                        steps: 198
                                                                                                       lr: 4e-05
episode: 1354
                score: 2.0
                              memory length: 252399
                                                        epsilon: 0.6982480000065507
                                                                                                                      evaluation re
episode: 1355
                score: 2.0
                              memory length: 252582
                                                        epsilon: 0.6978856600065586
                                                                                        steps: 183
                                                                                                       1r: 4e-05
                                                                                                                      evaluation re
episode: 1356
                score: 3.0
                              memory length: 252829
                                                        epsilon: 0.6973966000065692
                                                                                        steps: 247
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1357
                              memory length: 253076
                                                        epsilon: 0.6969075400065798
                                                                                        steps: 247
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
                score: 3.0
episode: 1358
                score: 1.0
                              memory length: 253229
                                                        epsilon: 0.6966046000065864
                                                                                        steps: 153
                                                                                                       1r: 4e-05
                                                                                                                      evaluation re
episode: 1359
                score: 5.0
                              memory length: 253575
                                                        epsilon: 0.6959195200066013
                                                                                        steps: 346
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
                score: 0.0
episode: 1360
                              memory length: 253699
                                                        epsilon: 0.6956740000066066
                                                                                        steps: 124
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1361
                score: 5.0
                              memory length: 254008
                                                        epsilon: 0.6950621800066199
                                                                                                       1r: 4e-05
                                                                                        steps: 309
                                                                                                                      evaluation re
episode: 1362
                score: 2.0
                              memory length: 254207
                                                        epsilon: 0.6946681600066285
                                                                                        steps: 199
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1363
                score: 1.0
                              memory length: 254378
                                                        epsilon: 0.6943295800066358
                                                                                        steps: 171
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
                score: 4.0
                                                                                                       lr: 4e-05
                                                        epsilon: 0.6937593400066482
                                                                                        steps: 288
episode: 1364
                              memory length: 254666
                                                                                                                      evaluation re
episode: 1365
                score: 2.0
                              memory length: 254865
                                                        epsilon: 0.6933653200066567
                                                                                        steps: 199
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1366
                score: 2.0
                              memory length: 255082
                                                        epsilon: 0.6929356600066661
                                                                                        steps: 217
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1367
                score: 4.0
                              memory length: 255378
                                                        epsilon: 0.6923495800066788
                                                                                        steps: 296
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1368
                score: 4.0
                              memory length: 255694
                                                        ensilon: 0.6917239000066924
                                                                                        steps: 316
                                                                                                       1r: 4e-05
                                                                                                                      evaluation re
                              memory length: 255893
episode: 1369
                score: 2.0
                                                        epsilon: 0.6913298800067009
                                                                                        steps: 199
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1370
                score: 3.0
                              memory length: 256123
                                                        epsilon: 0.6908744800067108
                                                                                        steps: 230
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1371
                score: 0.0
                              memory length: 256247
                                                        epsilon: 0.6906289600067161
                                                                                        steps: 124
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1372
                score: 3.0
                              memory length: 256474
                                                        epsilon: 0.6901795000067259
                                                                                        steps: 227
                                                                                                       1r: 4e-05
                                                                                                                      evaluation re
episode: 1373
                score: 3.0
                              memory length: 256723
                                                        epsilon: 0.6896864800067366
                                                                                        steps: 249
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1374
                score: 4.0
                              memory length: 256999
                                                        epsilon: 0.6891400000067485
                                                                                        steps: 276
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
                score: 4.0
                                                                                                       1r: 4e-05
episode: 1375
                              memory length: 257295
                                                        epsilon: 0.6885539200067612
                                                                                        steps: 296
                                                                                                                      evaluation re
                score: 3.0
episode: 1376
                              memory length: 257543
                                                        epsilon: 0.6880628800067718
                                                                                        steps: 248
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1377
                score: 2.0
                              memory length: 257762
                                                        epsilon: 0.6876292600067813
                                                                                        steps: 219
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1378
                score: 2.0
                              memory length: 257960
                                                        epsilon: 0.6872372200067898
                                                                                        steps: 198
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
                                                                                                                      evaluation re
episode: 1379
                score: 1.0
                              memory length: 258133
                                                        epsilon: 0.6868946800067972
                                                                                        steps: 173
                                                                                                       lr: 4e-05
episode: 1380
                score: 3.0
                              memory
                                     length: 258383
                                                        epsilon: 0.686399680006808
                                                                                       steps: 250
                                                                                                      lr: 4e-05
                                                                                                                     evaluation rev
                score: 2.0
episode: 1381
                              memory length: 258564
                                                        epsilon: 0.6860413000068157
                                                                                        steps: 181
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1382
                score: 3.0
                              memory length: 258795
                                                        epsilon: 0.6855839200068257
                                                                                        steps: 231
                                                                                                       1r: 4e-05
                                                                                                                      evaluation re
episode: 1383
                                                        epsilon: 0.6851918800068342
                                                                                                       lr: 4e-05
                score: 2.0
                              memory length: 258993
                                                                                        steps: 198
                                                                                                                      evaluation re
                score: 2.0
episode: 1384
                              memory length: 259192
                                                        epsilon: 0.6847978600068427
                                                                                        steps: 199
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1385
                score: 4.0
                              memory length: 259470
                                                        epsilon: 0.6842474200068547
                                                                                        steps: 278
                                                                                                       1r: 4e-05
                                                                                                                      evaluation re
                              memory length: 259788
episode: 1386
                score: 4.0
                                                        epsilon: 0.6836177800068683
                                                                                        steps: 318
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1387
                score: 3.0
                              memory length: 260014
                                                        epsilon: 0.6831703000068781
                                                                                        steps: 226
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
                score: 0.0
                                                        epsilon: 0.6829267600068833
                                                                                                       lr: 4e-05
episode: 1388
                              memory length: 260137
                                                                                        steps: 123
                                                                                                                      evaluation re
episode: 1389
                score: 3.0
                              memory length: 260384
                                                        epsilon: 0.682437700006894
                                                                                       steps: 247
                                                                                                      lr: 4e-05
                                                                                                                     evaluation rev
episode: 1390
                score: 1.0
                              memory length: 260535
                                                        epsilon: 0.6821387200069005
                                                                                        steps: 151
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1391
                score: 5.0
                              memory length: 260861
                                                        epsilon: 0.6814932400069145
                                                                                        steps: 326
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1392
                score: 2.0
                              memory length: 261061
                                                        epsilon: 0.6810972400069231
                                                                                        steps: 200
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
                score: 3.0
                                                                                                                      evaluation re
episode: 1393
                              memory length: 261309
                                                        epsilon: 0.6806062000069337
                                                                                        steps: 248
                                                                                                       lr: 4e-05
episode: 1394
                score: 3.0
                              memory length: 261556
                                                        epsilon: 0.6801171400069443
                                                                                        steps: 247
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
                score: 3.0
                                                                                                      lr: 4e-05
                                                        epsilon: 0.679580560006956
                                                                                       steps: 271
episode: 1395
                              memory length: 261827
                                                                                                                     evaluation rev
episode: 1396
                score: 3.0
                              memory length: 262053
                                                        epsilon: 0.6791330800069657
                                                                                        steps: 226
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1397
                score: 2.0
                              memory length: 262251
                                                        epsilon: 0.6787410400069742
                                                                                        steps: 198
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
                score: 4.0
                                                        epsilon: 0.6781767400069865
episode: 1398
                              memory length: 262536
                                                                                        steps: 285
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
                                                        epsilon: 0.677875780006993
                                                                                                      1r: 4e-05
episode: 1399
                score: 1.0
                              memory length: 262688
                                                                                       steps: 152
                                                                                                                     evaluation rev
episode: 1400
                score: 2.0
                              memory length: 262870
                                                        epsilon: 0.6775154200070008
                                                                                        steps: 182
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1401
                score: 2.0
                              memory length: 263074
                                                        epsilon: 0.6771115000070096
                                                                                        steps: 204
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1402
                              memory length: 263304
                                                        epsilon: 0.6766561000070195
                                                                                        steps: 230
                                                                                                       lr: 4e-05
                score: 3.0
                                                                                                                      evaluation re
episode: 1403
                score: 2.0
                              memory length: 263503
                                                        epsilon: 0.676262080007028
                                                                                       steps: 199
                                                                                                      1r: 4e-05
                                                                                                                     evaluation rev
episode: 1404
                score: 0.0
                              memory length: 263626
                                                        epsilon: 0.6760185400070333
                                                                                        steps: 123
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
                score: 2.0
episode: 1405
                              memory length: 263827
                                                        epsilon: 0.675620560007042
                                                                                       steps: 201
                                                                                                      lr: 4e-05
                                                                                                                     evaluation rev
episode: 1406
                score: 3.0
                              memory length: 264053
                                                        epsilon: 0.6751730800070517
                                                                                        steps: 226
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
                score: 2.0
episode: 1407
                              memory length: 264252
                                                        epsilon: 0.6747790600070602
                                                                                        steps: 199
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1408
                score: 11.0
                               memory length: 264681
                                                        epsilon: 0.6739296400070787
                                                                                         steps: 429
                                                                                                        lr: 4e-05
                                                                                                                       evaluation 1
episode: 1409
                score: 2.0
                              memory length: 264879
                                                        epsilon: 0.6735376000070872
                                                                                        steps: 198
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
                                                                                                                      evaluation re
episode: 1410
                score: 2.0
                              memory length: 265078
                                                        epsilon: 0.6731435800070957
                                                                                        steps: 199
                                                                                                       lr: 4e-05
episode: 1411
                score: 2.0
                              memory
                                     length: 265260
                                                        epsilon: 0.6727832200071036
                                                                                        steps: 182
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1412
                score: 0.0
                              memory length: 265384
                                                        epsilon: 0.6725377000071089
                                                                                        steps: 124
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1413
                                                        epsilon: 0.6721436800071174
                score: 2.0
                              memory length: 265583
                                                                                        steps: 199
                                                                                                       1r: 4e-05
                                                                                                                      evaluation re
                                                        epsilon: 0.671751640007126
                                                                                                      lr: 4e-05
episode: 1414
                score: 2.0
                              memory length: 265781
                                                                                       steps: 198
                                                                                                                     evaluation rev
                score: 5.0
                                                        epsilon: 0.6711378400071393
episode: 1415
                              memory length: 266091
                                                                                        steps: 310
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1416
                              memory length: 266310
                                                        epsilon: 0.6707042200071487
                                                                                                       1r: 4e-05
                score: 2.0
                                                                                        steps: 219
                                                                                                                      evaluation re
                              memory length: 266536
episode: 1417
                score: 3.0
                                                        epsilon: 0.6702567400071584
                                                                                        steps: 226
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1418
                score: 2.0
                              memory length: 266734
                                                        epsilon: 0.6698647000071669
                                                                                        steps: 198
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1419
                score: 2.0
                              memory length: 266914
                                                        epsilon: 0.6695083000071747
                                                                                                       lr: 4e-05
                                                                                        steps: 180
                                                                                                                      evaluation re
episode: 1420
                score: 3.0
                              memory length: 267162
                                                        epsilon: 0.6690172600071853
                                                                                        steps: 248
                                                                                                       1r: 4e-05
                                                                                                                      evaluation re
episode: 1421
                score: 0.0
                                                        epsilon: 0.6687717400071906
                                                                                        steps: 124
                                                                                                       lr: 4e-05
                              memory length: 267286
                                                                                                                      evaluation re
episode: 1422
                score: 2.0
                              memory length: 267485
                                                        epsilon: 0.6683777200071992
                                                                                        steps: 199
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1423
                score: 1.0
                              memory length: 267656
                                                        ensilon: 0.6680391400072065
                                                                                        steps: 171
                                                                                                       1r: 4e-05
                                                                                                                      evaluation re
                score: 2.0
episode: 1424
                              memory length: 267839
                                                        epsilon: 0.6676768000072144
                                                                                        steps: 183
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1425
                score: 4.0
                              memory length: 268133
                                                        epsilon: 0.667094680007227
                                                                                       steps: 294
                                                                                                      lr: 4e-05
                                                                                                                     evaluation rev
                              memory length: 268332
episode: 1426
                score: 2.0
                                                        epsilon: 0.6667006600072356
                                                                                        steps: 199
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
                              memory length: 268530
episode: 1427
                                                        epsilon: 0.6663086200072441
                score: 2.0
                                                                                        steps: 198
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1428
                score: 4.0
                              memory
                                     length: 268827
                                                        epsilon: 0.6657205600072569
                                                                                        steps: 297
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
                score: 3.0
                                                                                        steps: 247
episode: 1429
                              memory length: 269074
                                                        epsilon: 0.6652315000072675
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
                                                        epsilon: 0.6649859800072728
episode: 1430
                score: 0.0
                              memory length: 269198
                                                                                        steps: 124
                                                                                                       1r: 4e-05
                                                                                                                      evaluation re
                score: 2.0
episode: 1431
                              memory length: 269397
                                                        epsilon: 0.6645919600072814
                                                                                        steps: 199
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1432
                score: 2.0
                              memory length: 269596
                                                        epsilon: 0.6641979400072899
                                                                                        steps: 199
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
                              memory length: 269885
                                                                                        steps: 289
                                                                                                       lr: 4e-05
episode: 1433
                score: 4.0
                                                        epsilon: 0.6636257200073024
                                                                                                                      evaluation re
episode: 1434
                score: 4.0
                              memory length: 270182
                                                        epsilon: 0.6630376600073151
                                                                                        steps: 297
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
```

```
epsilon: 0.6626000800073246
                                                                                                       lr: 4e-05
episode: 1435
                score: 2.0
                              memory length: 270403
                                                                                        steps: 221
                                                                                                                      evaluation re
episode: 1436
                score: 2.0
                              memory length: 270625
                                                       epsilon: 0.6621605200073342
                                                                                        steps: 222
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
                              memory length: 270797
episode: 1437
                score: 1.0
                                                       ensilon: 0.6618199600073416
                                                                                        steps: 172
                                                                                                       1r: 4e-05
                                                                                                                      evaluation re
episode: 1438
                score: 3.0
                              memory length: 271023
                                                       epsilon: 0.6613724800073513
                                                                                        steps: 226
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1439
                score: 1.0
                              memory length: 271193
                                                       epsilon: 0.6610358800073586
                                                                                        steps: 170
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1440
                score: 3.0
                              memory length: 271440
                                                       epsilon: 0.6605468200073692
                                                                                        steps: 247
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1441
                score: 2.0
                              memory length: 271640
                                                       epsilon: 0.6601508200073778
                                                                                        steps: 200
                                                                                                       1r: 4e-05
                                                                                                                      evaluation re
                                                                                        steps: 229
episode: 1442
                score: 3.0
                              memory length: 271869
                                                        epsilon: 0.6596974000073876
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
                              memory length: 272021
                                                                                                       lr: 4e-05
episode: 1443
                score: 1.0
                                                       epsilon: 0.6593964400073942
                                                                                        steps: 152
                                                                                                                      evaluation re
                                                       epsilon: 0.6590578600074015
episode: 1444
                score: 1.0
                              memory length: 272192
                                                                                        steps: 171
                                                                                                       1r: 4e-05
                                                                                                                      evaluation re
episode: 1445
                score: 1.0
                              memory length: 272363
                                                       epsilon: 0.6587192800074089
                                                                                        steps: 171
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1446
                score: 3.0
                              memory length: 272595
                                                       epsilon: 0.6582599200074188
                                                                                        steps: 232
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
                                                                                        steps: 202
episode: 1447
                score: 2.0
                              memory length: 272797
                                                       epsilon: 0.6578599600074275
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
                                                                                                                     evaluation rev
episode: 1448
                score: 3.0
                              memory length: 273041
                                                        epsilon: 0.657376840007438
                                                                                       steps: 244
                                                                                                      lr: 4e-05
episode: 1449
                score: 1.0
                              memory length: 273211
                                                       epsilon: 0.6570402400074453
                                                                                        steps: 170
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
                score: 6.0
episode: 1450
                              memory length: 273562
                                                       epsilon: 0.6563452600074604
                                                                                                       lr: 4e-05
                                                                                        steps: 351
                                                                                                                     evaluation re
episode: 1451
                score: 2.0
                              memory length: 273761
                                                       epsilon: 0.655951240007469
                                                                                       steps: 199
                                                                                                      1r: 4e-05
                                                                                                                     evaluation rev
episode: 1452
                score: 3.0
                              memory length: 274027
                                                        epsilon: 0.6554245600074804
                                                                                        steps: 266
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1453
                score: 3.0
                              memory length: 274237
                                                       epsilon: 0.6550087600074894
                                                                                        steps: 210
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
                              memory length: 274513
episode: 1454
                                                       ensilon: 0.6544622800075013
                                                                                        steps: 276
                                                                                                       1r: 4e-05
                score: 4.0
                                                                                                                      evaluation re
episode: 1455
                score: 4.0
                              memory length: 274773
                                                       epsilon: 0.6539474800075125
                                                                                        steps: 260
                                                                                                       1r: 4e-05
                                                                                                                      evaluation re
episode: 1456
                score: 4.0
                              memory length: 275033
                                                       epsilon: 0.6534326800075236
                                                                                        steps: 260
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1457
                              memory length: 275232
                                                                                                       lr: 4e-05
                score: 2.0
                                                       epsilon: 0.6530386600075322
                                                                                        steps: 199
                                                                                                                     evaluation re
episode: 1458
                score: 3.0
                              memory length: 275459
                                                       epsilon: 0.652589200007542
                                                                                       steps: 227
                                                                                                      1r: 4e-05
                                                                                                                     evaluation rev
episode: 1459
                score: 3.0
                              memory length: 275704
                                                        epsilon: 0.6521041000075525
                                                                                        steps: 245
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
                              memory length: 275931
                                                       epsilon: 0.6516546400075622
                                                                                                       lr: 4e-05
episode: 1460
                score: 3.0
                                                                                        steps: 227
                                                                                                                     evaluation re
episode: 1461
                score: 2.0
                              memory length: 276111
                                                       epsilon: 0.65129824000757
                                                                                      steps: 180
                                                                                                     lr: 4e-05
                                                                                                                    evaluation rewa
                                                                                                                      evaluation re
episode: 1462
                score: 8.0
                              memory length: 276481
                                                        epsilon: 0.6505656400075859
                                                                                        steps: 370
                                                                                                       lr: 4e-05
episode: 1463
                score: 3.0
                              memory length: 276729
                                                       epsilon: 0.6500746000075965
                                                                                        steps: 248
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1464
                score: 2.0
                              memory length: 276928
                                                       epsilon: 0.6496805800076051
                                                                                        steps: 199
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
episode: 1465
                score: 3.0
                              memory length: 277155
                                                        epsilon: 0.6492311200076148
                                                                                        steps: 227
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
                score: 0.0
episode: 1466
                              memory
                                     length: 277279
                                                        epsilon: 0.6489856000076202
                                                                                        steps: 124
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
                score: 1.0
episode: 1467
                              memory length: 277451
                                                       epsilon: 0.6486450400076276
                                                                                        steps: 172
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
                                                       epsilon: 0.6482272600076366
episode: 1468
                score: 3.0
                              memory length: 277662
                                                                                        steps: 211
                                                                                                       1r: 4e-05
                                                                                                                      evaluation re
                score: 7.0
                                                       epsilon: 0.6474530800076534
episode: 1469
                              memory length: 278053
                                                                                        steps: 391
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1470
                score: 4.0
                              memory length: 278349
                                                        epsilon: 0.6468670000076662
                                                                                        steps: 296
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1471
                score: 0.0
                              memory length: 278472
                                                       epsilon: 0.6466234600076715
                                                                                        steps: 123
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
episode: 1472
                score: 2.0
                              memory length: 278671
                                                       epsilon: 0.64622944000768
                                                                                      steps: 199
                                                                                                     lr: 4e-05
                                                                                                                    evaluation rewa
episode: 1473
                score: 4.0
                              memory length: 278968
                                                       epsilon: 0.6456413800076928
                                                                                        steps: 297
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1474
                              memory length: 279170
                                                       epsilon: 0.6452414200077015
                                                                                                       lr: 4e-05
                score: 2.0
                                                                                        steps: 202
                                                                                                                      evaluation re
                                                       epsilon: 0.6447880000077113
episode: 1475
                score: 3.0
                              memory length: 279399
                                                                                        steps: 229
                                                                                                       1r: 4e-05
                                                                                                                      evaluation re
                                                                                        steps: 229
                                                       epsilon: 0.6443345800077211
                                                                                                       lr: 4e-05
episode: 1476
                score: 3.0
                              memory length: 279628
                                                                                                                      evaluation re
episode: 1477
                score: 3.0
                              memory length: 279855
                                                       epsilon: 0.6438851200077309
                                                                                        steps: 227
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1478
                score: 5.0
                              memory length: 280181
                                                       epsilon: 0.6432396400077449
                                                                                        steps: 326
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
                                                                                                                      evaluation re
episode: 1479
                score: 2.0
                              memory length: 280380
                                                       epsilon: 0.6428456200077535
                                                                                        steps: 199
                                                                                                       lr: 4e-05
episode: 1480
                score: 4.0
                              memory length: 280677
                                                       epsilon: 0.6422575600077662
                                                                                        steps: 297
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
episode: 1481
                score: 3.0
                              memory length: 280904
                                                       epsilon: 0.641808100007776
                                                                                       steps: 227
                                                                                                      lr: 4e-05
                                                                                                                     evaluation rev
episode: 1482
                score: 2.0
                              memory length: 281105
                                                       epsilon: 0.6414101200077846
                                                                                        steps: 201
                                                                                                       1r: 4e-05
                                                                                                                     evaluation re
episode: 1483
                score: 2.0
                              memory length: 281303
                                                        epsilon: 0.6410180800077931
                                                                                        steps: 198
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1484
                score: 1.0
                              memory length: 281455
                                                       epsilon: 0.6407171200077997
                                                                                        steps: 152
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1485
                              memory length: 281701
                                                       epsilon: 0.6402300400078103
                                                                                                       1r: 4e-05
                score: 3.0
                                                                                        steps: 246
                                                                                                                      evaluation re
                                                       epsilon: 0.6396103000078237
episode: 1486
                score: 4.0
                              memory length: 282014
                                                                                        steps: 313
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1487
                score: 3.0
                              memory length: 282261
                                                       epsilon: 0.6391212400078343
                                                                                        steps: 247
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
                                                                                                       lr: 4e-05
episode: 1488
                              memory length: 282431
                                                       epsilon: 0.6387846400078416
                                                                                        steps: 170
                                                                                                                      evaluation re
                score: 1.0
episode: 1489
                score: 3.0
                              memory length: 282679
                                                       epsilon: 0.6382936000078523
                                                                                        steps: 248
                                                                                                       1r: 4e-05
                                                                                                                     evaluation re
episode: 1490
                score: 5.0
                              memory length: 283020
                                                       epsilon: 0.637618420007867
                                                                                       steps: 341
                                                                                                      lr: 4e-05
                                                                                                                     evaluation rev
episode: 1491
                score: 3.0
                              memory length: 283249
                                                       epsilon: 0.6371650000078768
                                                                                        steps: 229
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
                score: 2.0
                              memory length: 283447
                                                                                                       lr: 4e-05
episode: 1492
                                                       epsilon: 0.6367729600078853
                                                                                        steps: 198
                                                                                                                     evaluation re
episode: 1493
                score: 3.0
                              memory length: 283696
                                                        epsilon: 0.636279940007896
                                                                                       steps: 249
                                                                                                      lr: 4e-05
                                                                                                                     evaluation rev
episode: 1494
                score: 3.0
                                     length: 283964
                                                       epsilon: 0.6357493000079075
                                                                                        steps: 268
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
                              memory
episode: 1495
                score: 3.0
                              memory length: 284190
                                                       epsilon: 0.6353018200079172
                                                                                        steps: 226
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
episode: 1496
                score: 3.0
                              memory length: 284417
                                                       epsilon: 0.634852360007927
                                                                                       steps: 227
                                                                                                      lr: 4e-05
                                                                                                                     evaluation rev
episode: 1497
                score: 1.0
                              memory
                                     length: 284569
                                                        epsilon: 0.6345514000079335
                                                                                        steps: 152
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1498
                score: 3.0
                              memory length: 284797
                                                       epsilon: 0.6340999600079433
                                                                                        steps: 228
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
episode: 1499
                score: 3.0
                              memory length: 285026
                                                        epsilon: 0.6336465400079532
                                                                                        steps: 229
                                                                                                       1r: 4e-05
                                                                                                                      evaluation re
episode: 1500
                score: 4.0
                              memory length: 285319
                                                        epsilon: 0.6330664000079658
                                                                                                       lr: 4e-05
                                                                                        steps: 293
                                                                                                                      evaluation re
                score: 2.0
                              memory length: 285500
                                                       epsilon: 0.6327080200079735
                                                                                                       lr: 4e-05
episode: 1501
                                                                                        steps: 181
                                                                                                                      evaluation re
                                                                                        steps: 199
episode: 1502
                score: 2.0
                              memory length: 285699
                                                       epsilon: 0.6323140000079821
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1503
                score: 2.0
                              memory length: 285899
                                                       epsilon: 0.6319180000079907
                                                                                        steps: 200
                                                                                                       1r: 4e-05
                                                                                                                      evaluation re
episode: 1504
                score: 3.0
                              memory length: 286130
                                                       epsilon: 0.6314606200080006
                                                                                        steps: 231
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
                              memory length: 286407
episode: 1505
                score: 4.0
                                                       epsilon: 0.6309121600080125
                                                                                        steps: 277
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
                score: 4.0
                                                                                                       lr: 4e-05
episode: 1506
                              memory length: 286663
                                                       epsilon: 0.6304052800080235
                                                                                        steps: 256
                                                                                                                     evaluation re
                                                                                       steps: 219
                                                                                                      lr: 4e-05
episode: 1507
                score: 2.0
                              memory length: 286882
                                                       epsilon: 0.629971660008033
                                                                                                                     evaluation rev
episode: 1508
                score: 2.0
                              memory length: 287098
                                                       epsilon: 0.6295439800080422
                                                                                        steps: 216
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1509
                score: 2.0
                              memory length: 287317
                                                       epsilon: 0.6291103600080517
                                                                                        steps: 219
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
                                                                                                                      evaluation re
episode: 1510
                score: 6.0
                              memory length: 287709
                                                        epsilon: 0.6283342000080685
                                                                                        steps: 392
                                                                                                       lr: 4e-05
episode: 1511
                score: 3.0
                              memory length: 287936
                                                       epsilon: 0.6278847400080783
                                                                                        steps: 227
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
                                                                                        steps: 247
episode: 1512
                score: 3.0
                              memory length: 288183
                                                       epsilon: 0.6273956800080889
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
episode: 1513
                score: 4.0
                              memory length: 288482
                                                       epsilon: 0.6268036600081017
                                                                                        steps: 299
                                                                                                       1r: 4e-05
                                                                                                                      evaluation re
                score: 5.0
                                                       epsilon: 0.6261958000081149
                                                                                                       lr: 4e-05
episode: 1514
                              memory length: 288789
                                                                                        steps: 307
                                                                                                                      evaluation re
episode: 1515
                score: 2.0
                              memory length: 288987
                                                       epsilon: 0.6258037600081234
                                                                                        steps: 198
                                                                                                       lr: 4e-05
                                                                                                                     evaluation re
                                                                                                       1r: 4e-05
episode: 1516
                score: 3.0
                              memory length: 289221
                                                       ensilon: 0.6253404400081335
                                                                                        steps: 234
                                                                                                                      evaluation re
episode: 1517
                score: 5.0
                              memory length: 289527
                                                       epsilon: 0.6247345600081466
                                                                                        steps: 306
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1518
                score: 5.0
                              memory length: 289855
                                                       epsilon: 0.6240851200081607
                                                                                        steps: 328
                                                                                                       lr: 4e-05
                                                                                                                      evaluation re
episode: 1519
                                                       epsilon: 0.6237465400081681
                                                                                        steps: 171
                                                                                                       lr: 4e-05
                score: 1.0
                              memory length: 290026
                                                                                                                     evaluation re
```

```
epsilon: 0.6232555000081788
                                                                                       steps: 248
episode: 1520
                score: 3.0
                              memory length: 290274
                                                                                                      1r: 4e-05
                                                                                                                     evaluation re
episode: 1521
                score: 3.0
                              memory length: 290521
                                                       epsilon: 0.6227664400081894
                                                                                        steps: 247
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1522
                score: 4.0
                              memory length: 290794
                                                       epsilon: 0.6222259000082011
                                                                                        steps: 273
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1523
                              memory length: 291062
                                                       epsilon: 0.6216952600082126
                                                                                       steps: 268
                                                                                                      lr: 4e-05
                score: 3.0
                                                                                                                     evaluation re
                score: 2.0
                                                                                                     lr: 4e-05
                                                                                                                    evaluation rev
episode: 1524
                              memory length: 291281
                                                       epsilon: 0.621261640008222
                                                                                       steps: 219
episode: 1525
                score: 2.0
                              memory length: 291462
                                                       epsilon: 0.6209032600082298
                                                                                        steps: 181
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
                                                                                                      lr: 4e-05
episode: 1526
                score: 2.0
                              memory length: 291661
                                                       epsilon: 0.6205092400082384
                                                                                       steps: 199
                                                                                                                     evaluation re
episode: 1527
                score: 3.0
                              memory length: 291890
                                                       epsilon: 0.6200558200082482
                                                                                        steps: 229
                                                                                                      1r: 4e-05
                                                                                                                     evaluation re
episode: 1528
                score: 5.0
                              memory length: 292216
                                                       epsilon: 0.6194103400082622
                                                                                        steps: 326
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1529
                score: 2.0
                              memory length: 292415
                                                       epsilon: 0.6190163200082708
                                                                                       steps: 199
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
                                                       epsilon: 0.6184579600082829
episode: 1530
                score: 7.0
                              memory length: 292697
                                                                                        steps: 282
                                                                                                      1r: 4e-05
                                                                                                                     evaluation re
                                                                                                      lr: 4e-05
episode: 1531
                score: 3.0
                              memory length: 292945
                                                       epsilon: 0.6179669200082936
                                                                                        steps: 248
                                                                                                                     evaluation re
episode: 1532
                score: 4.0
                              memory length: 293241
                                                       epsilon: 0.6173808400083063
                                                                                       steps: 296
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1533
                score: 2.0
                              memory length: 293460
                                                       epsilon: 0.6169472200083157
                                                                                       steps: 219
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1534
                                                       epsilon: 0.6166046800083231
                score: 1.0
                              memory length: 293633
                                                                                        steps: 173
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1535
                score: 1.0
                              memory length: 293784
                                                       epsilon: 0.6163057000083296
                                                                                        steps: 151
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1536
                score: 4.0
                              memory length: 294058
                                                       epsilon: 0.6157631800083414
                                                                                       steps: 274
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
                                                       epsilon: 0.6153632200083501
episode: 1537
                score: 2.0
                              memory length: 294260
                                                                                       steps: 202
                                                                                                      1r: 4e-05
                                                                                                                     evaluation re
                                                       epsilon: 0.6150622600083566
episode: 1538
                score: 1.0
                              memory length: 294412
                                                                                        steps: 152
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1539
                score: 0.0
                              memory length: 294536
                                                       epsilon: 0.614816740008362
                                                                                       steps: 124
                                                                                                     lr: 4e-05
                                                                                                                    evaluation rev
episode: 1540
                              memory length: 294763
                                                       ensilon: 0.6143672800083717
                score: 3.0
                                                                                       steps: 227
                                                                                                      1r: 4e-05
                                                                                                                     evaluation re
episode: 1541
                score: 5.0
                              memory length: 295092
                                                       epsilon: 0.6137158600083858
                                                                                        steps: 329
                                                                                                      1r: 4e-05
                                                                                                                     evaluation re
episode: 1542
                score: 3.0
                              memory length: 295340
                                                       epsilon: 0.6132248200083965
                                                                                        steps: 248
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
                              memory length: 295513
                                                                                                     lr: 4e-05
episode: 1543
                score: 1.0
                                                       epsilon: 0.612882280008404
                                                                                      steps: 173
                                                                                                                    evaluation rev
episode: 1544
                score: 4.0
                              memory length: 295789
                                                       epsilon: 0.6123358000084158
                                                                                        steps: 276
                                                                                                      1r: 4e-05
                                                                                                                     evaluation re
episode: 1545
                score: 3.0
                                                                                        steps: 227
                              memory length: 296016
                                                       epsilon: 0.6118863400084256
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
                              memory length: 296261
episode: 1546
                                                       epsilon: 0.6114012400084361
                                                                                                      lr: 4e-05
                score: 3.0
                                                                                       steps: 245
                                                                                                                     evaluation re
                score: 2.0
                                                       epsilon: 0.6109676200084455
                                                                                       steps: 219
                                                                                                      lr: 4e-05
episode: 1547
                              memory length: 296480
                                                                                                                     evaluation re
episode: 1548
                score: 2.0
                              memory length: 296682
                                                       epsilon: 0.6105676600084542
                                                                                        steps: 202
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1549
                score: 2.0
                              memory length: 296884
                                                       epsilon: 0.6101677000084629
                                                                                       steps: 202
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1550
                                                       epsilon: 0.6098311000084702
                score: 1.0
                              memory length: 297054
                                                                                       steps: 170
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1551
                score: 3.0
                              memory length: 297303
                                                       epsilon: 0.6093380800084809
                                                                                        steps: 249
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
                score: 5.0
episode: 1552
                              memory
                                     length: 297585
                                                       epsilon: 0.608779720008493
                                                                                       steps: 282
                                                                                                     lr: 4e-05
                                                                                                                    evaluation rev
                score: 5.0
episode: 1553
                              memory length: 297925
                                                       epsilon: 0.6081065200085076
                                                                                                      lr: 4e-05
                                                                                       steps: 340
                                                                                                                     evaluation re
episode: 1554
                score: 5.0
                              memory length: 298190
                                                       epsilon: 0.607581820008519
                                                                                      steps: 265
                                                                                                     1r: 4e-05
                                                                                                                    evaluation rev
                score: 4.0
                                                                                        steps: 275
episode: 1555
                              memory length: 298465
                                                       epsilon: 0.6070373200085308
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1556
                score: 2.0
                              memory length: 298647
                                                       epsilon: 0.6066769600085387
                                                                                        steps: 182
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1557
                score: 2.0
                              memory length: 298846
                                                       epsilon: 0.6062829400085472
                                                                                       steps: 199
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1558
                score: 3.0
                              memory length: 299078
                                                       epsilon: 0.6058235800085572
                                                                                        steps: 232
                                                                                                      1r: 4e-05
                                                                                                                     evaluation re
episode: 1559
                score: 2.0
                              memory length: 299277
                                                       epsilon: 0.6054295600085657
                                                                                        steps: 199
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1560
                score: 0.0
                              memory length: 299401
                                                       epsilon: 0.6051840400085711
                                                                                       steps: 124
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
                                                       epsilon: 0.6046969600085816
episode: 1561
                score: 3.0
                              memory length: 299647
                                                                                       steps: 246
                                                                                                      1r: 4e-05
                                                                                                                     evaluation re
                                                                                        steps: 227
episode: 1562
                score: 3.0
                              memory length: 299874
                                                       epsilon: 0.6042475000085914
                                                                                                      lr: 4e-05
                                                                                                                     evaluation re
episode: 1563
                score: 3.0
                              memory length: 300122
                                                       epsilon: 0.6037564600086021
                                                                                        steps: 248
                                                                                                      lr: 1.60000000000000003e-05
                score: 4.0
                                                                                      steps: 277
episode: 1564
                              memory length: 300399
                                                       epsilon: 0.603208000008614
                                                                                                     lr: 1.60000000000000003e-05
                                                                                                      lr: 1.6000000000000003e-05
episode: 1565
                score: 5.0
                              memory length: 300744
                                                       epsilon: 0.6025249000086288
                                                                                        steps: 345
episode: 1566
                score: 3.0
                              memorv
                                     length: 300974
                                                       epsilon: 0.6020695000086387
                                                                                        steps: 230
                                                                                                      lr: 1.60000000000000003e-05
episode: 1567
                score: 4.0
                                                                                       steps: 261
                              memory length: 301235
                                                       epsilon: 0.6015527200086499
                                                                                                      lr: 1.60000000000000003e-05
                                                       epsilon: 0.600950800008663
episode: 1568
                score: 5.0
                              memory length: 301539
                                                                                      steps: 304
                                                                                                     lr: 1.6000000000000003e-05
                score: 3.0
                              memory length: 301766
                                                       epsilon: 0.6005013400086727
episode: 1569
                                                                                                      lr: 1.6000000000000003e-05
                                                                                        steps: 227
episode: 1570
                score: 4.0
                              memory length: 302043
                                                       epsilon: 0.5999528800086846
                                                                                       steps: 277
                                                                                                      lr: 1.6000000000000003e-05
episode: 1571
                              memory length: 302357
                score: 4.0
                                                       epsilon: 0.5993311600086981
                                                                                       steps: 314
                                                                                                      lr: 1.60000000000000003e-05
episode: 1572
                score: 3.0
                              memory length: 302604
                                                       epsilon: 0.5988421000087087
                                                                                        steps: 247
                                                                                                      lr: 1.60000000000000003e-05
episode: 1573
                score: 3.0
                              memory length: 302850
                                                       epsilon: 0.5983550200087193
                                                                                        steps: 246
                                                                                                      lr: 1.6000000000000003e-05
                                                       epsilon: 0.5979035800087291
episode: 1574
                score: 3.0
                              memory length: 303078
                                                                                       steps: 228
                                                                                                      lr: 1.6000000000000003e-05
episode: 1575
                                                       epsilon: 0.5972224600087439
                score: 5.0
                              memory length: 303422
                                                                                        steps: 344
                                                                                                      lr: 1.60000000000000003e-05
episode: 1576
                score: 3.0
                              memory length: 303649
                                                       epsilon: 0.5967730000087537
                                                                                        steps: 227
                                                                                                      lr: 1.60000000000000003e-05
episode: 1577
                score: 2.0
                              memory length: 303848
                                                       epsilon: 0.5963789800087622
                                                                                                      lr: 1.6000000000000003e-05
                                                                                       steps: 199
episode: 1578
                                                                                       steps: 245
                                                                                                      1r: 1.6000000000000003e-05
                score: 3.0
                              memory length: 304093
                                                       epsilon: 0.5958938800087727
                                                       epsilon: 0.5953018600087856
episode: 1579
                score: 4.0
                              memory length: 304392
                                                                                        steps: 299
                                                                                                      lr: 1.6000000000000003e-05
episode: 1580
                score: 3.0
                                     length: 304639
                                                       epsilon: 0.5948128000087962
                                                                                        steps: 247
                                                                                                      lr: 1.6000000000000003e-05
                              memory
episode: 1581
                              memory length: 304866
                                                       epsilon: 0.594363340008806
                                                                                      steps: 227
                score: 3.0
                                                                                                     lr: 1.60000000000000003e-05
                                                                                                      lr: 1.6000000000000003e-05
episode: 1582
                score: 5.0
                              memory length: 305190
                                                       epsilon: 0.5937218200088199
                                                                                        steps: 324
                                                                                                      lr: 1.6000000000000003e-05
episode: 1583
                score: 2.0
                              memory
                                     length: 305391
                                                       epsilon: 0.5933238400088285
                                                                                        steps: 201
episode: 1584
                score: 4.0
                              memory length: 305686
                                                       epsilon: 0.5927397400088412
                                                                                       steps: 295
                                                                                                      lr: 1.6000000000000003e-05
                              memory length: 306032
episode: 1585
                score: 5.0
                                                       ensilon: 0.5920546600088561
                                                                                       steps: 346
                                                                                                      lr: 1.60000000000000003e-05
episode: 1586
                score: 5.0
                                     length: 306356
                                                       epsilon: 0.59141314000887
                                                                                                    lr: 1.6000000000000003e-05
                              memory
                                                                                      steps: 324
episode: 1587
                score: 3.0
                              memory length: 306624
                                                       epsilon: 0.5908825000088815
                                                                                        steps: 268
                                                                                                      lr: 1.6000000000000003e-05
episode: 1588
                score: 4.0
                              memory length: 306923
                                                       epsilon: 0.5902904800088944
                                                                                       steps: 299
                                                                                                      lr: 1.60000000000000003e-05
episode: 1589
                score: 4.0
                              memory length: 307201
                                                       epsilon: 0.5897400400089063
                                                                                        steps: 278
                                                                                                      lr: 1.60000000000000003e-05
episode: 1590
                score: 2.0
                              memory length: 307400
                                                       epsilon: 0.5893460200089149
                                                                                        steps: 199
                                                                                                      lr: 1.60000000000000003e-05
episode: 1591
                score: 2.0
                              memory length: 307580
                                                       epsilon: 0.5889896200089226
                                                                                                      lr: 1.6000000000000003e-05
                                                                                       steps: 180
episode: 1592
                score: 2.0
                              memory length: 307779
                                                       epsilon: 0.5885956000089312
                                                                                        steps: 199
                                                                                                      lr: 1.60000000000000003e-05
                                                                                                      epsilon: 0.5877105400089504
episode: 1593
                score: 7.0
                              memory length: 308226
                                                                                        steps: 447
episode: 1594
                score: 7.0
                              memory length: 308628
                                                       epsilon: 0.5869145800089677
                                                                                        steps: 402
                                                                                                      lr: 1.6000000000000003e-05
episode: 1595
                score: 5.0
                              memory length: 308950
                                                       epsilon: 0.5862770200089815
                                                                                       steps: 322
                                                                                                      lr: 1.60000000000000003e-05
                                                                                                      lr: 1.6000000000000003e-05
episode: 1596
                score: 3.0
                              memory length: 309177
                                                       epsilon: 0.5858275600089913
                                                                                        steps: 227
episode: 1597
                score: 3.0
                              memorv
                                     length: 309389
                                                       epsilon: 0.5854078000090004
                                                                                        steps: 212
                                                                                                          1.6000000000000003e-05
                score: 2.0
                                                                                        steps: 219
episode: 1598
                              memory length: 309608
                                                       epsilon: 0.5849741800090098
                                                                                                      lr: 1.6000000000000003e-05
episode: 1599
                score: 1.0
                              memory length: 309760
                                                       epsilon: 0.5846732200090163
                                                                                        steps: 152
                                                                                                      lr: 1.60000000000000003e-05
                              memory length: 309989
                                                       epsilon: 0.5842198000090262
                                                                                                      lr: 1.6000000000000003e-05
episode: 1600
                score: 3.0
                                                                                        steps: 229
                score: 6.0
                                                       epsilon: 0.5834377000090432
                                                                                       steps: 395
                                                                                                      lr: 1.6000000000000003e-05
episode: 1601
                              memory length: 310384
episode: 1602
                                                                                        steps: 199
                score: 2.0
                              memory length: 310583
                                                       epsilon: 0.5830436800090517
                                                                                                      lr: 1.60000000000000003e-05
episode: 1603
                score: 4.0
                              memory length: 310841
                                                       epsilon: 0.5825328400090628
                                                                                        steps: 258
                                                                                                      lr: 1.60000000000000003e-05
episode: 1604
                score: 2.0
                              memory length: 311041
                                                       epsilon: 0.5821368400090714
                                                                                        steps: 200
                                                                                                      lr: 1.60000000000000003e-05
```

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                                                      epsilon: 0.5816517400090819
                score: 3.0
                              memory length: 311286
                                                                                       steps: 245
                                                                                                     lr: 1.6000000000000003e-05
episode: 1605
episode: 1606
                score: 2.0
                              memory length: 311503
                                                       epsilon: 0.5812220800090913
                                                                                       steps: 217
                                                                                                     lr: 1.6000000000000000000000e-05
                                     length: 311793
                                                       epsilon: 0.5806478800091037
episode: 1607
                                                                                       steps: 290
                                                                                                     lr: 1.6000000000000003e-05
                score: 5.0
                              memory
                score: 3.0
episode: 1608
                              memory length: 312040
                                                       epsilon: 0.5801588200091143
                                                                                       steps: 247
                                                                                                     lr: 1.6000000000000003e-05
episode: 1609
                score: 4.0
                              memory length: 312296
                                                       epsilon: 0.5796519400091253
                                                                                       steps: 256
                                                                                                     lr: 1.60000000000000003e-05
                score: 3.0
episode: 1610
                              memory length: 312523
                                                       epsilon: 0.5792024800091351
                                                                                       steps: 227
                                                                                                     lr: 1.60000000000000003e-05
episode: 1611
                score: 3.0
                              memory length: 312768
                                                       epsilon: 0.5787173800091456
                                                                                       steps: 245
                                                                                                     lr: 1.6000000000000003e-05
                score: 3.0
                                                      epsilon: 0.5781887200091571
                                                                                                     lr: 1.6000000000000003e-05
episode: 1612
                              memory length: 313035
                                                                                       steps: 267
episode: 1613
                score: 0.0
                                                       epsilon: 0.5779432000091624
                              memory length: 313159
                                                                                       steps: 124
                                                                                                     lr: 1.60000000000000003e-05
episode: 1614
                score: 4.0
                              memory length: 313428
                                                       epsilon: 0.577410580009174
                                                                                      steps: 269
                                                                                                    1r: 1.60000000000000003e-05
                              memory length: 313722
                                                       epsilon: 0.5768284600091866
                                                                                                     lr: 1.60000000000000003e-05
episode: 1615
                score: 4.0
                                                                                       steps: 294
                                                       epsilon: 0.5764205800091955
episode: 1616
                score: 2.0
                              memory length: 313928
                                                                                       steps: 206
                                                                                                     lr: 1.60000000000000003e-05
episode: 1617
                score: 5.0
                              memory length: 314253
                                                       epsilon: 0.5757770800092095
                                                                                       steps: 325
                                                                                                     lr: 1.600000000000000000003e-05
episode: 1618
                score: 6.0
                              memory length: 314633
                                                       epsilon: 0.5750246800092258
                                                                                       steps: 380
                                                                                                     lr: 1.6000000000000003e-05
                score: 2.0
                              memory length: 314833
                                                       epsilon: 0.5746286800092344
                                                                                       steps: 200
episode: 1619
                                                                                                     lr: 1.60000000000000003e-05
episode: 1620
                score: 3.0
                              memory length: 315081
                                                       epsilon: 0.574137640009245
                                                                                      steps: 248
                                                                                                    lr: 1.6000000000000003e-05
episode: 1621
                score: 1.0
                              memorv
                                     length: 315233
                                                       epsilon: 0.5738366800092516
                                                                                       steps: 152
                                                                                                     lr: 1.6000000000000003e-05
                score: 3.0
episode: 1622
                              memory length: 315460
                                                       epsilon: 0.5733872200092613
                                                                                       steps: 227
                                                                                                     lr: 1.6000000000000003e-05
                              memory length: 315630
                                                       epsilon: 0.5730506200092687
episode: 1623
                score: 1.0
                                                                                       steps: 170
                                                                                                     epsilon: 0.5724170200092824
episode: 1624
                score: 6.0
                              memory length: 315950
                                                                                                     lr: 1.6000000000000003e-05
                                                                                       steps: 320
episode: 1625
                score: 3.0
                              memory length: 316179
                                                       epsilon: 0.5719636000092923
                                                                                       steps: 229
                                                                                                     lr: 1.6000000000000003e-05
episode: 1626
                              memory length: 316465
                                                                                       steps: 286
                score: 4.0
                                                       epsilon: 0.5713973200093045
                                                                                                     lr: 1.600000000000000000003e-05
episode: 1627
                score: 4.0
                              memory length: 316760
                                                       epsilon: 0.5708132200093172
                                                                                       steps: 295
                                                                                                     lr: 1.60000000000000003e-05
episode: 1628
                score: 1.0
                              memory length: 316912
                                                       epsilon: 0.5705122600093238
                                                                                       steps: 152
                                                                                                     lr: 1.6000000000000003e-05
                                                       epsilon: 0.5702113000093303
episode: 1629
                              memory length: 317064
                                                                                                     lr: 1.6000000000000003e-05
                score: 1.0
                                                                                       steps: 152
                                                       epsilon: 0.5697143200093411
episode: 1630
                score: 3.0
                              memory length: 317315
                                                                                       steps: 251
                                                                                                     lr: 1.60000000000000003e-05
episode: 1631
                score: 4.0
                              memory length: 317634
                                                       epsilon: 0.5690827000093548
                                                                                       steps: 319
                                                                                                     lr: 1.60000000000000003e-05
episode: 1632
                score: 4.0
                              memory length: 317931
                                                       epsilon: 0.5684946400093676
                                                                                       steps: 297
                                                                                                     lr: 1.60000000000000003e-05
                score: 2.0
                                                       epsilon: 0.568061020009377
                                                                                      steps: 219
                                                                                                    lr: 1.6000000000000003e-05
episode: 1633
                              memory length: 318150
                              memory length: 318351
                                                       epsilon: 0.5676630400093856
episode: 1634
                score: 2.0
                                                                                       steps: 201
                                                                                                     lr: 1.600000000000000000003e-05
episode: 1635
                score: 2.0
                                     length: 318550
                                                       epsilon: 0.5672690200093942
                                                                                       steps: 199
                                                                                                     lr: 1.6000000000000003e-05
                              memorv
                              memory length: 318723
                                                       epsilon: 0.5669264800094016
                                                                                       steps: 173
                                                                                                     lr: 1.6000000000000003e-05
episode: 1636
                score: 1.0
episode: 1637
                score: 3.0
                              memory length: 318950
                                                       epsilon: 0.5664770200094114
                                                                                       steps: 227
                                                                                                     lr: 1.6000000000000000000000e-05
episode: 1638
                              memory length: 319289
                                                       epsilon: 0.5658058000094259
                                                                                                     lr: 1.6000000000000003e-05
                score: 6.0
                                                                                       steps: 339
                score: 3.0
                                                                                      steps: 212
episode: 1639
                              memory length: 319501
                                                       epsilon: 0.565386040009435
                                                                                                    lr: 1.6000000000000003e-05
episode: 1640
                score: 4.0
                              memory length: 319761
                                                       ensilon: 0.5648712400094462
                                                                                       steps: 260
                                                                                                     lr: 1.60000000000000003e-05
episode: 1641
                score: 4.0
                                     length: 320016
                                                       epsilon: 0.5643663400094572
                                                                                       steps: 255
                                                                                                     lr: 1.6000000000000003e-05
                              memory
episode: 1642
                score: 8.0
                              memory length: 320367
                                                       epsilon: 0.5636713600094723
                                                                                       steps: 351
                                                                                                     lr: 1.6000000000000003e-05
episode: 1643
                score: 2.0
                              memory length: 320568
                                                       epsilon: 0.5632733800094809
                                                                                       steps: 201
                                                                                                     lr: 1.6000000000000003e-05
episode: 1644
                score: 3.0
                              memory length: 320799
                                                       epsilon: 0.5628160000094908
                                                                                       steps: 231
                                                                                                     lr: 1.60000000000000003e-05
episode: 1645
                score: 3.0
                                                       epsilon: 0.5623526800095009
                                                                                       steps: 234
                                                                                                     lr: 1.6000000000000003e-05
                              memory length: 321033
episode: 1646
                score: 3.0
                              memory length: 321267
                                                       epsilon: 0.561889360009511
                                                                                      steps: 234
                                                                                                    lr: 1.6000000000000003e-05
episode: 1647
                score: 3.0
                              memory length: 321494
                                                       epsilon: 0.5614399000095207
                                                                                       steps: 227
                                                                                                     lr: 1.60000000000000003e-05
episode: 1648
                score: 4.0
                              memory length: 321752
                                                       epsilon: 0.5609290600095318
                                                                                       steps: 258
                                                                                                     lr: 1.6000000000000003e-05
episode: 1649
                score: 4.0
                              memory length: 322047
                                                       epsilon: 0.5603449600095445
                                                                                       steps: 295
                                                                                                     lr: 1.6000000000000003e-05
episode: 1650
                score: 3.0
                              memory length: 322317
                                                       epsilon: 0.5598103600095561
                                                                                       steps: 270
                                                                                                     lr: 1.60000000000000003e-05
episode: 1651
                score: 4.0
                              memory length: 322615
                                                       epsilon: 0.5592203200095689
                                                                                       steps: 298
                                                                                                     lr: 1.60000000000000003e-05
episode: 1652
                score: 6.0
                              memorv
                                     length: 322989
                                                       epsilon: 0.558479800009585
                                                                                      steps: 374
                                                                                                    lr: 1.6000000000000003e-05
episode: 1653
                score: 5.0
                                                                                      steps: 327
                              memory length: 323316
                                                       epsilon: 0.557832340009599
                                                                                                    lr: 1.6000000000000003e-05
episode: 1654
                              memory length: 323535
                                                       ensilon: 0.5573987200096084
                score: 2.0
                                                                                       steps: 219
                                                                                                     lr: 1.60000000000000003e-05
                score: 3.0
                              memory length: 323782
episode: 1655
                                                       epsilon: 0.5569096600096191
                                                                                                     lr: 1.6000000000000003e-05
                                                                                       steps: 247
episode: 1656
                score: 1.0
                              memory length: 323935
                                                       epsilon: 0.5566067200096256
                                                                                       steps: 153
                                                                                                     lr: 1.6000000000000003e-05
episode: 1657
                              memory length: 324134
                score: 2.0
                                                       epsilon: 0.5562127000096342
                                                                                       steps: 199
                                                                                                     lr: 1.600000000000000000003e-05
episode: 1658
                score: 5.0
                              memory length: 324456
                                                       epsilon: 0.555575140009648
                                                                                      steps: 322
                                                                                                    lr: 1.6000000000000003e-05
episode: 1659
                score: 3.0
                              memory length: 324724
                                                       epsilon: 0.5550445000096595
                                                                                       steps: 268
                                                                                                     lr: 1.6000000000000003e-05
                                                                                                     lr: 1.6000000000000003e-05
episode: 1660
                score: 3.0
                              memory length: 324951
                                                       epsilon: 0.5545950400096693
                                                                                       steps: 227
                                                       epsilon: 0.5542327000096772
episode: 1661
                score: 2.0
                              memory length: 325134
                                                                                       steps: 183
                                                                                                     lr: 1.60000000000000003e-05
                              memory length: 325392
                                                       epsilon: 0.5537218600096883
                                                                                       steps: 258
                                                                                                     lr: 1.6000000000000003e-05
episode: 1662
                score: 4.0
episode: 1663
                score: 3.0
                                     length: 325603
                                                      epsilon: 0.5533040800096973
                                                                                       steps: 211
                                                                                                     lr: 1.6000000000000003e-05
                              memory
                                                                                       steps: 259
episode: 1664
                score: 4.0
                              memory length: 325862
                                                       epsilon: 0.5527912600097085
                                                                                                     episode: 1665
                score: 3.0
                              memory length: 326089
                                                       epsilon: 0.5523418000097182
                                                                                       steps: 227
                                                                                                     lr: 1.6000000000000003e-05
episode: 1666
                score: 3.0
                              memory
                                     length: 326342
                                                       epsilon: 0.5518408600097291
                                                                                       steps: 253
                                                                                                         1.6000000000000003e-05
                score: 3.0
                                                       epsilon: 0.5514151600097383
                                                                                       steps: 215
episode: 1667
                              memory length: 326557
                                                                                                     memory length: 326940
                                                       epsilon: 0.5506568200097548
                                                                                                     lr: 1.60000000000000000003e-05
episode: 1668
                score: 7.0
                                                                                       steps: 383
                                                       epsilon: 0.5499875800097693
episode: 1669
                score: 5.0
                              memory
                                     length: 327278
                                                                                       steps: 338
                                                                                                         1.6000000000000003e-05
episode: 1670
                score: 3.0
                              memory length: 327489
                                                       epsilon: 0.5495698000097784
                                                                                       steps: 211
                                                                                                     lr: 1.6000000000000003e-05
episode: 1671
                              memory length: 327786
                                                       epsilon: 0.5489817400097912
                score: 4.0
                                                                                       steps: 297
                                                                                                     lr: 1.600000000000000000003e-05
episode: 1672
                score: 4.0
                              memory
                                     length: 328062
                                                       epsilon: 0.548435260009803
                                                                                      steps: 276
                                                                                                    lr: 1.6000000000000003e-05
episode: 1673
                score: 2.0
                              memory length: 328280
                                                       epsilon: 0.5480036200098124
                                                                                       steps: 218
                                                                                                     lr: 1.6000000000000003e-05
episode: 1674
                              memory length: 328509
                                                       epsilon: 0.5475502000098222
                                                                                                     lr: 1.6000000000000003e-05
                score: 3.0
                                                                                       steps: 229
episode: 1675
                                                       epsilon: 0.547100740009832
                score: 3.0
                              memory length: 328736
                                                                                      steps: 227
                                                                                                    lr: 1.6000000000000003e-05
                                                       epsilon: 0.5467384000098399
                                                                                                     lr: 1.6000000000000003e-05
episode: 1676
                score: 2.0
                              memory length: 328919
                                                                                       steps: 183
episode: 1677
                              memory length: 329146
                                                       epsilon: 0.5462889400098496
                score: 3.0
                                                                                       steps: 227
                                                                                                     lr: 1.6000000000000003e-05
episode: 1678
                score: 4.0
                              memory length: 329424
                                                       ensilon: 0.5457385000098616
                                                                                       steps: 278
                                                                                                     lr: 1.60000000000000003e-05
                              memory length: 329672
                                                       epsilon: 0.5452474600098722
                                                                                                     lr: 1.6000000000000003e-05
episode: 1679
                score: 3.0
                                                                                       steps: 248
episode: 1680
                score: 5.0
                              memory length: 329984
                                                       epsilon: 0.5446297000098856
                                                                                       steps: 312
                                                                                                         1.60000000000000003e-05
                score: 6.0
episode: 1681
                              memory length: 330359
                                                       epsilon: 0.5438872000099018
                                                                                       steps: 375
                                                                                                     lr: 1.60000000000000003e-05
episode: 1682
                score: 6.0
                              memory length: 330754
                                                       epsilon: 0.5431051000099187
                                                                                       steps: 395
                                                                                                     1r: 1.6000000000000003e-05
                              memorv
episode: 1683
                score: 4.0
                                     length: 331030
                                                       epsilon: 0.5425586200099306
                                                                                       steps: 276
                                                                                                         1.6000000000000003e-05
                score: 3.0
episode: 1684
                              memory length: 331298
                                                       epsilon: 0.5420279800099421
                                                                                       steps: 268
                                                                                                     lr: 1.6000000000000003e-05
episode: 1685
                score: 2.0
                              memory length: 331499
                                                       epsilon: 0.5416300000099508
                                                                                       steps: 201
                                                                                                     lr: 1.60000000000000003e-05
                                    length: 331796
                                                       epsilon: 0.5410419400099635
episode: 1686
                score: 4.0
                                                                                                     lr: 1.6000000000000003e-05
                              memory
                                                                                       steps: 297
episode: 1687
                score: 2.0
                              memory length: 331996
                                                       epsilon: 0.5406459400099721
                                                                                       steps: 200
                                                                                                     lr: 1.60000000000000003e-05
episode: 1688
                score: 2.0
                              memory length: 332212
                                                       epsilon: 0.5402182600099814
                                                                                       steps: 216
                                                                                                     lr: 1.60000000000000003e-05
                       2 0
                                                       engilon. N 5398183000099901
anienda. 1689
                              memory length: 332414
                                                                                       c+anc. 202
                                                                                                         gcore.
```

```
Tellârii: 337414
                                                                                   sceps: 202
ертропе: 1002
                SCOLE: 2.0
                                                    ераттоп: 0.000010000000000
                                                                                                 episode: 1690
               score: 5.0
                             memorv
                                   length: 332696
                                                    epsilon: 0.5392599400100022
                                                                                   steps: 282
                                                                                                 lr: 1.6000000000000003e-05
               score: 4.0
                            memory length: 332991
                                                    epsilon: 0.5386758400100149
                                                                                   steps: 295
episode: 1691
                                                                                                 episode: 1692
               score: 4.0
                            memory length: 333251
                                                    epsilon: 0.5381610400100261
                                                                                   steps: 260
                                                                                                 lr: 1.6000000000000000000000e-05
episode: 1693
               score: 7.0
                                   length: 333678
                                                    epsilon: 0.5373155800100444
                                                                                   steps: 427
                                                                                                 lr: 1.6000000000000003e-05
                             memory
episode: 1694
               score: 6.0
                            memory length: 334076
                                                    epsilon: 0.5365275400100615
                                                                                   steps: 398
                                                                                                 lr: 1.6000000000000003e-05
episode: 1695
               score: 4.0
                            memory length: 334374
                                                    epsilon: 0.5359375000100743
                                                                                   steps: 298
                                                                                                 lr: 1.6000000000000003e-05
episode: 1696
               score: 2.0
                                   length: 334592
                                                    epsilon: 0.5355058600100837
                                                                                   steps: 218
                                                                                                 1r: 1.6000000000000003e-05
                            memory
episode: 1697
               score: 6.0
                             memory length: 334990
                                                    epsilon: 0.5347178200101008
                                                                                   steps: 398
                                                                                                 lr: 1.6000000000000003e-05
               score: 3.0
                            memory length: 335236
                                                    epsilon: 0.5342307400101114
                                                                                                 lr: 1.6000000000000003e-05
episode: 1698
                                                                                   steps: 246
episode: 1699
               score: 3.0
                            memory length: 335467
                                                    ensilon: 0.5337733600101213
                                                                                   steps: 231
                                                                                                 lr: 1.60000000000000003e-05
               score: 2.0
episode: 1700
                             memory length: 335666
                                                     epsilon: 0.5333793400101299
                                                                                   steps: 199
                                                                                                 lr: 1.6000000000000003e-05
episode: 1701
               score: 4.0
                             memory length: 335944
                                                    epsilon: 0.5328289000101418
                                                                                   steps: 278
                                                                                                 lr: 1.6000000000000003e-05
episode: 1702
               score: 1.0
                            memory length: 336096
                                                    ensilon: 0.5325279400101484
                                                                                   steps: 152
                                                                                                 lr: 1.60000000000000003e-05
episode: 1703
               score: 4.0
                             memory length: 336392
                                                     epsilon: 0.5319418600101611
                                                                                   steps: 296
                                                                                                 episode: 1704
               score: 4.0
                                   length: 336692
                                                    epsilon: 0.531347860010174
                                                                                   steps: 300
                                                                                                 lr: 1.6000000000000003e-05
                             memorv
               score: 7.0
episode: 1705
                            memory length: 337117
                                                    epsilon: 0.5305063600101922
                                                                                   steps: 425
                                                                                                 lr: 1.6000000000000003e-05
episode: 1706
                                                     epsilon: 0.5298866200102057
               score: 5.0
                             memory length: 337430
                                                                                   steps: 313
                                                                                                 lr: 1.60000000000000003e-05
                                                    epsilon: 0.5292470800102196
episode: 1707
                             memorv
                                                                                                 lr: 1.6000000000000003e-05
               score: 6.0
                                   length: 337753
                                                                                   steps: 323
               score: 5.0
episode: 1708
                            memory length: 338062
                                                    epsilon: 0.5286352600102329
                                                                                   steps: 309
                                                                                                 lr: 1.6000000000000003e-05
episode: 1709
               score: 4.0
                            memory length: 338338
                                                    epsilon: 0.5280887800102447
                                                                                   steps: 276
                                                                                                 lr: 1.6000000000000000000000e-05
               score: 8.0
                             memory length: 338766
                                                                                                 lr: 1.6000000000000003e-05
episode: 1710
                                                    epsilon: 0.5272413400102631
                                                                                   steps: 428
episode: 1711
               score: 3.0
                            memory length: 338992
                                                    epsilon: 0.5267938600102728
                                                                                   steps: 226
                                                                                                 lr: 1.60000000000000003e-05
               score: 4.0
                            memory length: 339268
episode: 1712
                                                    epsilon: 0.5262473800102847
                                                                                   steps: 276
                                                                                                 memory length: 339516
episode: 1713
               score: 3.0
                                                    epsilon: 0.5257563400102954
                                                                                   steps: 248
                                                                                                 1r: 1.6000000000000003e-05
episode: 1714
               score: 3.0
                             memory length: 339748
                                                    epsilon: 0.5252969800103053
                                                                                   steps: 232
                                                                                                 lr: 1.6000000000000003e-05
               score: 2.0
episode: 1715
                            memory length: 339949
                                                    epsilon: 0.524899000010314
                                                                                  steps: 201
                                                                                                 lr: 1.6000000000000003e-05
episode: 1716
               score: 4.0
                            memory length: 340209
                                                    ensilon: 0.5243842000103252
                                                                                   steps: 260
                                                                                                 lr: 1.60000000000000003e-05
                score: 2.0
                             memory length: 340428
                                                    epsilon: 0.5239505800103346
                                                                                   steps: 219
episode: 1717
                                                                                                 lr: 1.6000000000000003e-05
                                   length: 340707
episode: 1718
               score: 4.0
                                                    epsilon: 0.5233981600103466
                                                                                   steps: 279
                                                                                                 lr: 1.60000000000000003e-05
                             memory
episode: 1719
               score: 4.0
                            memory length: 341003
                                                    epsilon: 0.5228120800103593
                                                                                   steps: 296
                                                                                                 memory length: 341233
episode: 1720
               score: 3.0
                                                    epsilon: 0.5223566800103692
                                                                                   steps: 230
                                                                                                 episode: 1721
               score: 3.0
                             memorv
                                   length: 341481
                                                    epsilon: 0.5218656400103798
                                                                                   steps: 248
                                                                                                     1.60000000000000003e-05
episode: 1722
               score: 2.0
                            memory length: 341662
                                                    epsilon: 0.5215072600103876
                                                                                   steps: 181
                                                                                                 lr: 1.6000000000000003e-05
                            memory length: 341938
episode: 1723
               score: 4.0
                                                    epsilon: 0.5209607800103995
                                                                                   steps: 276
                                                                                                 lr: 1.6000000000000000000000e-05
episode: 1724
               score: 4.0
                                   length: 342216
                             memory
                                                     epsilon: 0.5204103400104114
                                                                                   steps: 278
                                                                                                 lr: 1.6000000000000003e-05
episode: 1725
               score: 7.0
                             memory length: 342579
                                                    epsilon: 0.519691600010427
                                                                                   steps: 363
                                                                                                 lr: 1.6000000000000003e-05
                            memory length: 342955
episode: 1726
               score: 6.0
                                                    epsilon: 0.5189471200104432
                                                                                   steps: 376
                                                                                                 lr: 1.60000000000000003e-05
episode: 1727
               score: 2.0
                             memory
                                   length: 343154
                                                    epsilon: 0.5185531000104517
                                                                                   steps: 199
                                                                                                 lr: 1.60000000000000003e-05
episode: 1728
               score: 3.0
                             memory length: 343398
                                                     epsilon: 0.5180699800104622
                                                                                   steps: 244
                                                                                                 lr: 1.6000000000000003e-05
episode: 1729
                                                    epsilon: 0.5176126000104722
                                                                                                 lr: 1.6000000000000003e-05
               score: 3.0
                            memory length: 343629
                                                                                   steps: 231
                                                    epsilon: 0.516883960010488
episode: 1730
               score: 7.0
                            memory length: 343997
                                                                                   steps: 368
                                                                                                 lr: 1.6000000000000003e-05
               score: 3.0
                             memory length: 344224
                                                    epsilon: 0.5164345000104977
                                                                                                 lr: 1.6000000000000003e-05
episode: 1731
                                                                                   steps: 227
episode: 1732
               score: 4.0
                            memory length: 344481
                                                    epsilon: 0.5159256400105088
                                                                                   steps: 257
                                                                                                 lr: 1.60000000000000003e-05
                            memory length: 344759
episode: 1733
               score: 4.0
                                                    ensilon: 0.5153752000105207
                                                                                   steps: 278
                                                                                                 lr: 1.6000000000000003e-05
episode: 1734
               score: 3.0
                             memory length: 344986
                                                     epsilon: 0.5149257400105305
                                                                                   steps: 227
                                                                                                 lr: 1.6000000000000003e-05
episode: 1735
               score: 4.0
                                   length: 345284
                                                    epsilon: 0.5143357000105433
                                                                                   steps: 298
                                                                                                     1.6000000000000003e-05
                             memorv
               score: 3.0
                            memory length: 345512
                                                    epsilon: 0.5138842600105531
episode: 1736
                                                                                   steps: 228
                                                                                                 episode: 1737
               score: 5.0
                            memory length: 345817
                                                    epsilon: 0.5132803600105662
                                                                                   steps: 305
                                                                                                 lr: 1.60000000000000003e-05
episode: 1738
               score: 1.0
                             memorv
                                   length: 345988
                                                    epsilon: 0.5129417800105736
                                                                                   steps: 171
                                                                                                 episode: 1739
               score: 4.0
                            memory length: 346264
                                                    epsilon: 0.5123953000105854
                                                                                   steps: 276
                                                                                                 lr: 1.6000000000000003e-05
episode: 1740
               score: 3.0
                            memory length: 346493
                                                    epsilon: 0.5119418800105953
                                                                                   steps: 229
                                                                                                 lr: 1.6000000000000003e-05
               score: 2.0
                             memory length: 346692
                                                                                   steps: 199
                                                                                                 episode: 1741
                                                    epsilon: 0.5115478600106038
episode: 1742
               score: 6.0
                             memory length: 347070
                                                    epsilon: 0.5107994200106201
                                                                                   steps: 378
                                                                                                 lr: 1.6000000000000003e-05
episode: 1743
                            memory length: 347272
                                                    epsilon: 0.5103994600106287
                                                                                   steps: 202
                                                                                                 lr: 1.60000000000000003e-05
               score: 2.0
episode: 1744
                                                     epsilon: 0.5092669000106533
               score: 10.0
                             memory length: 347844
                                                                                    steps: 572
                                                                                                  score: 3.0
                             memory length: 348071
                                                     epsilon: 0.5088174400106631
                                                                                   steps: 227
                                                                                                 lr: 1.6000000000000003e-05
episode: 1745
                            memory length: 348414
episode: 1746
                                                    epsilon: 0.5081383000106778
                                                                                                 lr: 1.60000000000000003e-05
               score: 5.0
                                                                                   steps: 343
episode: 1747
               score: 1.0
                            memory length: 348566
                                                    ensilon: 0.5078373400106844
                                                                                   steps: 152
                                                                                                 lr: 1.60000000000000003e-05
                                                    epsilon: 0.5072334400106975
episode: 1748
               score: 5.0
                             memory length: 348871
                                                                                   steps: 305
                                                                                                 lr: 1.6000000000000003e-05
episode: 1749
               score: 7.0
                                   length: 349250
                                                    epsilon: 0.5064830200107138
                                                                                   steps: 379
                                                                                                 lr: 1.60000000000000003e-05
                            memory
episode: 1750
               score: 4.0
                            memory length: 349526
                                                    epsilon: 0.5059365400107256
                                                                                   steps: 276
                                                                                                 memory length: 349773
episode: 1751
               score: 3.0
                                                     epsilon: 0.5054474800107362
                                                                                   steps: 247
                                                                                                 lr: 1.60000000000000003e-05
episode: 1752
               score: 2.0
                             memorv
                                   length: 349972
                                                    epsilon: 0.5050534600107448
                                                                                   steps: 199
                                                                                                     1.60000000000000003e-05
episode: 1753
               score: 3.0
                            memory length: 350204
                                                    epsilon: 0.5045941000107548
                                                                                   steps: 232
                                                                                                 lr: 1.6000000000000003e-05
                            memory length: 350528
episode: 1754
               score: 5.0
                                                    epsilon: 0.5039525800107687
                                                                                   steps: 324
                                                                                                 lr: 1.60000000000000003e-05
                score: 3.0
                                   length: 350755
episode: 1755
                                                    epsilon: 0.5035031200107785
                                                                                                     1.6000000000000003e-05
                             memory
                                                                                   steps: 227
episode: 1756
               score: 2.0
                             memory length: 350956
                                                    epsilon: 0.5031051400107871
                                                                                   steps: 201
                                                                                                 lr: 1.6000000000000003e-05
episode: 1757
                            memory length: 351358
                                                                                   steps: 402
                                                                                                 lr: 1.6000000000000003e-05
               score: 7.0
                                                    epsilon: 0.5023091800108044
episode: 1758
               score: 3.0
                                   length: 351585
                                                     epsilon: 0.5018597200108141
                                                                                   steps: 227
                                                                                                 lr: 1.60000000000000003e-05
                            memory
episode: 1759
               score: 3.0
                             memory length: 351832
                                                    epsilon: 0.5013706600108248
                                                                                   steps: 247
                                                                                                 lr: 1.6000000000000003e-05
episode: 1760
                            memory length: 352059
                                                    epsilon: 0.5009212000108345
                                                                                   steps: 227
                                                                                                 lr: 1.6000000000000003e-05
               score: 3.0
episode: 1761
               score: 7.0
                            memory length: 352448
                                                    ensilon: 0.5001509800108512
                                                                                   steps: 389
                                                                                                 lr: 1.60000000000000003e-05
episode: 1762
                score: 6.0
                             memory length: 352821
                                                     epsilon: 0.4994124400108508
                                                                                   steps: 373
                                                                                                 lr: 1.6000000000000003e-05
episode: 1763
               score: 3.0
                            memory length: 353036
                                                    epsilon: 0.4989867400108481
                                                                                                 lr: 1.60000000000000003e-05
                                                                                   steps: 215
episode: 1764
               score: 4.0
                            memory length: 353313
                                                    epsilon: 0.4984382800108446
                                                                                   steps: 277
                                                                                                 lr: 1.60000000000000003e-05
                                                    epsilon: 0.49798486001084175
episode: 1765
               score: 3.0
                            memory length: 353542
                                                                                    steps: 229
                                                                                                  episode: 1766
               score: 5.0
                                   length: 353847
                                                    epsilon: 0.4973809600108379
                                                                                   steps: 305
                                                                                                 lr: 1.60000000000000003e-05
                             memorv
episode: 1767
               score: 4.0
                            memory length: 354123
                                                    epsilon: 0.49683448001083447
                                                                                    steps: 276
                                                                                                  episode: 1768
               score: 1.0
                             memory length: 354275
                                                     epsilon: 0.49653352001083256
                                                                                    steps: 152
episode: 1769
               score: 3.0
                             memory
                                   length: 354522
                                                    epsilon: 0.49604446001082947
                                                                                    steps: 247
                                                                                                      1.60000000000000003e-05
               score: 3.0
episode: 1770
                            memory length: 354730
                                                    epsilon: 0.49563262001082686
                                                                                    steps: 208
                                                                                                  epsilon: 0.495183160010824
episode: 1771
               score: 3.0
                            memory length: 354957
                                                                                  steps: 227
                                                                                                 lr: 1.60000000000000003e-05
episode: 1772
               score: 3.0
                                   length: 355183
                                                    epsilon: 0.4947356800108212
                                                                                   steps: 226
                                                                                                 memory
episode: 1773
               score: 3.0
                            memory length: 355410
                                                    epsilon: 0.49428622001081834
                                                                                    steps: 227
```

```
epsilon: 0.4937397400108149
                                                                                          1r: 1.60000000000000003e-05
episode: 1774
              score: 4.0
                          memory length: 355686
                                                                             steps: 276
episode: 1775
              score: 3.0
                          memory length: 355913
                                                 epsilon: 0.49329028001081204
                                                                              steps: 227
                                                                                           score: 4.0
                                                 epsilon: 0.4927735000108088
episode: 1776
                                 length: 356174
                                                                              steps: 261
                                                                                          lr: 1.6000000000000003e-05
episode: 1777
                                                 epsilon: 0.49202902001080406
              score: 6.0
                          memory length: 356550
                                                                              steps: 376
                                                                                           episode: 1778
              score: 5.0
                          memory
                                 length: 356856
                                                 epsilon: 0.49142314001080023
                                                                              steps: 306
                                                                                           epsilon: 0.4910212000107977
episode: 1779
              score: 2.0
                          memory
                                 length: 357059
                                                                              steps: 203
                                                                                          lr: 1.60000000000000003e-05
episode: 1780
              score: 8.0
                          memory length: 357523
                                                 epsilon: 0.4901024800107919
                                                                              steps: 464
                                                                                          lr: 1.6000000000000003e-05
                          memory length: 357855
episode: 1781
              score: 6.0
                                                 epsilon: 0.4894451200107877
                                                                             steps: 332
                                                                                          lr: 1.6000000000000003e-05
                                 length: 358178
episode: 1782
              score: 5.0
                          memory
                                                 epsilon: 0.48880558001078367
                                                                              steps: 323
                                                                                           lr: 1.60000000000000003e-05
episode: 1783
              score: 3.0
                          memory length: 358427
                                                 epsilon: 0.48831256001078055
                                                                              steps: 249
                                                                                           score: 3.0
                                                                              steps: 231
episode: 1784
                          memory length: 358658
                                                 epsilon: 0.48785518001077766
                                                                                           episode: 1785
              score: 6.0
                          memory length: 358997
                                                 ensilon: 0.4871839600107734
                                                                              steps: 339
                                                                                          lr: 1.60000000000000003e-05
episode: 1786
              score: 2.0
                          memory length: 359179
                                                 epsilon: 0.48682360001077113
                                                                              steps: 182
                                                                                           episode: 1787
              score: 6.0
                          memory
                                 length: 359514
                                                 epsilon: 0.48616030001076693
                                                                              steps: 335
                                                                                           memory length: 359745
                                                                              steps: 231
episode: 1788
              score: 3.0
                                                 epsilon: 0.48570292001076404
                                                                                           episode: 1789
              score: 5.0
                          memory length: 360093
                                                 epsilon: 0.4850138800107597
                                                                              steps: 348
                                                                                          lr: 1.60000000000000003e-05
episode: 1790
              score: 5.0
                          memory
                                 length: 360423
                                                 epsilon: 0.48436048001075555
                                                                              steps: 330
                                                                                           episode: 1791
              score: 2.0
                          memory length: 360622
                                                 epsilon: 0.48396646001075305
                                                                              steps: 199
                                                                                           episode: 1792
              score: 3.0
                          memory length: 360849
                                                 epsilon: 0.4835170000107502
                                                                              steps: 227
                                                                                          lr: 1.60000000000000003e-05
                                 length: 361204
                                                 epsilon: 0.48281410001074576
                                                                                           lr: 1.6000000000000003e-05
episode: 1793
              score: 6.0
                          memory
                                                                              steps: 355
episode: 1794
              score: 3.0
                          memory length: 361417
                                                 epsilon: 0.4823923600107431
                                                                              steps: 213
                                                                                           lr: 1.60000000000000003e-05
episode: 1795
              score: 2.0
                          memory length: 361618
                                                 epsilon: 0.4819943800107406
                                                                             steps: 201
                                                                                          lr: 1.6000000000000003e-05
                                 length: 361894
                                                                                          episode: 1796
              score: 4.0
                                                 epsilon: 0.4814479000107371
                                                                              steps: 276
episode: 1797
              score: 5.0
                          memory length: 362221
                                                 epsilon: 0.480800440010733
                                                                             steps: 327
                                                                                          lr: 1.6000000000000003e-05
episode: 1798
              score: 5.0
                          memory length: 362533
                                                 epsilon: 0.4801826800107291
                                                                             steps: 312
                                                                                          lr: 1.60000000000000003e-05
episode: 1799
              score: 5.0
                                 length: 362844
                                                 epsilon: 0.4795669000107252
                                                                             steps: 311
                                                                                          lr: 1.60000000000000003e-05
                          memory
                                                 epsilon: 0.4792639600107233
                                                                                          lr: 1.6000000000000003e-05
episode: 1800
              score: 1.0
                          memory length: 362997
                                                                              steps: 153
              score: 3.0
episode: 1801
                          memory length: 363208
                                                 epsilon: 0.47884618001072066
                                                                              steps: 211
                                                                                           episode: 1802
              score: 3.0
                          memory length: 363438
                                                 ensilon: 0.4783907800107178
                                                                              steps: 230
                                                                                          lr: 1.60000000000000003e-05
              score: 10.0
                                                  epsilon: 0.47763046001071296
episode: 1803
                           memory length: 363822
                                                                               steps: 384
                                                                                            episode: 1804
              score: 5.0
                          memory
                                 length: 364126
                                                 epsilon: 0.47702854001070916
                                                                              steps: 304
                                                                                           score: 3.0
                                                 epsilon: 0.4766107600107065
                                                                              steps: 211
episode: 1805
                          memory length: 364337
                                                                                          lr: 1.6000000000000003e-05
episode: 1806
              score: 4.0
                          memory length: 364595
                                                 epsilon: 0.4760999200107033
                                                                              steps: 258
                                                                                          lr: 1.60000000000000003e-05
episode: 1807
              score: 3.0
                          memorv
                                 length: 364806
                                                 epsilon: 0.47568214001070064
                                                                              steps: 211
                                                                                           episode: 1808
              score: 5.0
                          memory length: 365115
                                                 epsilon: 0.47507032001069677
                                                                              steps: 309
                                                                                           episode: 1809
                                                 epsilon: 0.4746485800106941
                                                                             steps: 213
                                                                                          lr: 1.60000000000000003e-05
              score: 3.0
                          memory
                                 length: 365328
episode: 1810
              score: 5.0
                                 length: 365656
                                                 epsilon: 0.47399914001069
                                                                            steps: 328
                                                                                         lr: 1.6000000000000003e-05
                          memory
episode: 1811
              score: 3.0
                          memory length: 365885
                                                 epsilon: 0.4735457200106871
                                                                              steps: 229
                                                                                          lr: 1.6000000000000003e-05
                          memory length: 366235
episode: 1812
              score: 5.0
                                                 epsilon: 0.47285272001068274
                                                                              steps: 350
                                                                                           episode: 1813
              score: 5.0
                                 length: 366561
                                                 epsilon: 0.47220724001067865
                                                                              steps: 326
                                                                                           memory
episode: 1814
              score: 3.0
                          memory length: 366792
                                                 epsilon: 0.47174986001067576
                                                                              steps: 231
                                                                                           episode: 1815
              score: 4.0
                          memory length: 367070
                                                 epsilon: 0.4711994200106723
                                                                              steps: 278
                                                                                          lr: 1.60000000000000003e-05
episode: 1816
              score: 3.0
                          memory length: 367297
                                                 ensilon: 0.47074996001066943
                                                                              steps: 227
                                                                                           episode: 1817
              score: 3.0
                          memory length: 367524
                                                 epsilon: 0.4703005000106666
                                                                              steps: 227
                                                                                          lr: 1.6000000000000003e-05
episode: 1818
              score: 8.0
                          memory length: 367958
                                                 epsilon: 0.46944118001066115
                                                                                           lr: 1.600000000000000000000e-05
                                                                              steps: 434
episode: 1819
              score: 6.0
                          memory length: 368333
                                                 epsilon: 0.46869868001065645
                                                                              steps: 375
                                                                                           epsilon: 0.4681977400106533
episode: 1820
              score: 4.0
                          memory length: 368586
                                                                              steps: 253
                                                                                          lr: 1.60000000000000003e-05
episode: 1821
              score: 3.0
                                 length: 368812
                                                 epsilon: 0.46775026001065045
                                                                              steps: 226
                                                                                           memorv
              score: 4.0
                          memory length: 369087
                                                 epsilon: 0.467205760010647
                                                                             steps: 275
episode: 1822
                                                                                          lr: 1.60000000000000003e-05
episode: 1823
              score: 3.0
                          memory length: 369297
                                                 epsilon: 0.4667899600106444
                                                                             steps: 210
                                                                                          lr: 1.60000000000000003e-05
episode: 1824
              score: 3.0
                          memory
                                 length: 369526
                                                 epsilon: 0.4663365400106415
                                                                              steps: 229
                                                                                          lr: 1.6000000000000003e-05
episode: 1825
              score: 5.0
                          memory length: 369889
                                                 epsilon: 0.46561780001063696
                                                                              steps: 363
                                                                                           memory length: 370266
                                                                                           episode: 1826
              score: 6.0
                                                 epsilon: 0.46487134001063224
                                                                              steps: 377
episode: 1827
              score: 3.0
                                 length: 370496
                                                 epsilon: 0.46441594001062936
                                                                              steps: 230
                                                                                           memory
episode: 1828
              score: 5.0
                          memory length: 370805
                                                 epsilon: 0.4638041200106255
                                                                              steps: 309
                                                                                          lr: 1.60000000000000003e-05
              score: 2.0
episode: 1829
                          memory length: 371007
                                                 epsilon: 0.46340416001062296
                                                                              steps: 202
                                                                                           episode: 1830
              score: 6.0
                                 length: 371382
                                                 epsilon: 0.46266166001061826
                                                                              steps: 375
                                                                                           lr: 1.60000000000000003e-05
                          memory
              score: 8.0
                                                                                           memory length: 371774
                                                                              steps: 392
episode: 1831
                                                 epsilon: 0.46188550001061335
episode: 1832
              score: 2.0
                          memory length: 371973
                                                                              steps: 199
                                                 epsilon: 0.46149148001061086
                                                                                           episode: 1833
              score: 3.0
                          memory length: 372223
                                                 epsilon: 0.4609964800106077
                                                                              steps: 250
                                                                                          lr: 1.60000000000000003e-05
                                                                                           episode: 1834
                          memory length: 372484
                                                 epsilon: 0.46047970001060445
              score: 4.0
                                                                              steps: 261
episode: 1835
                                 length: 372841
                                                 epsilon: 0.4597728400106
                                                                           steps: 357
                                                                                           1.60000000000000003e-05
              score: 6.0
                          memory
                                                                                       lr:
episode: 1836
              score: 4.0
                          memory length: 373117
                                                 epsilon: 0.4592263600105965
                                                                             steps: 276
                                                                                          episode: 1837
              score: 6.0
                          memory length: 373512
                                                 epsilon: 0.4584442600105916
                                                                              steps: 395
                                                                                          lr: 1.60000000000000003e-05
episode: 1838
              score: 5.0
                          memorv
                                 length: 373835
                                                 epsilon: 0.45780472001058753
                                                                              steps: 323
                                                                                           score: 4.0
                                                                              steps: 297
episode: 1839
                          memory length: 374132
                                                 epsilon: 0.4572166600105838
                                                                                          lr: 1.6000000000000003e-05
episode: 1840
              score: 2.0
                          memory length: 374353
                                                 epsilon: 0.45677908001058104
                                                                              steps: 221
                                                                                           score: 8.0
                                 length: 374778
                                                 epsilon: 0.4559375800105757
episode: 1841
                                                                                          lr: 1.6000000000000003e-05
                          memory
                                                                              steps: 425
episode: 1842
              score: 4.0
                          memory length: 375054
                                                 epsilon: 0.45539110001057226
                                                                              steps: 276
                                                                                           memory length: 375302
                                                 epsilon: 0.45490006001056915
                                                                              steps: 248
episode: 1843
              score: 3.0
                                                                                           episode: 1844
                                 length: 375627
              score: 5.0
                                                 epsilon: 0.4542565600105651
                                                                              steps: 325
                                                                                          1r: 1.6000000000000003e-05
                          memory
episode: 1845
              score: 6.0
                          memory length: 376021
                                                 epsilon: 0.45347644001056014
                                                                              steps: 394
                                                                                           episode: 1846
              score: 2.0
                          memory length: 376243
                                                 epsilon: 0.45303688001055736
                                                                              steps: 222
                                                                                           episode: 1847
              score: 8.0
                          memory length: 376672
                                                 ensilon: 0.452187460010552
                                                                             steps: 429
                                                                                          lr: 1.6000000000000003e-05
              score: 3.0
episode: 1848
                          memory length: 376921
                                                 epsilon: 0.45169444001054887
                                                                              steps: 249
                                                                                           episode: 1849
              score: 3.0
                                 length: 377188
                                                 epsilon: 0.4511657800105455
                                                                             steps: 267
                                                                                          lr: 1.60000000000000003e-05
                          memory
episode: 1850
              score: 3.0
                          memory length: 377415
                                                 epsilon: 0.4507163200105427
                                                                             steps: 227
                                                                                          lr: 1.60000000000000003e-05
                                                 epsilon: 0.4502569600105398
episode: 1851
              score: 3.0
                          memory length: 377647
                                                                              steps: 232
                                                                                          episode: 1852
              score: 5.0
                          memorv
                                 length: 377974
                                                 epsilon: 0.4496095000105357
                                                                              steps: 327
                                                                                          lr: 1.6000000000000003e-05
              score: 5.0
episode: 1853
                          memory length: 378281
                                                 epsilon: 0.44900164001053183
                                                                              steps: 307
                                                                                           episode: 1854
                                                 epsilon: 0.4485818800105292
              score: 3.0
                          memory length: 378493
                                                                              steps: 212
                                                                                          lr: 1.60000000000000003e-05
episode: 1855
              score: 4.0
                                 length: 378774
                                                 epsilon: 0.44802550001052566
                                                                              steps: 281
                                                                                           memory
episode: 1856
              score: 7.0
                          memory length: 379194
                                                 epsilon: 0.4471939000105204
                                                                              steps: 420
                                                                                           lr: 1.60000000000000003e-05
episode: 1857
              score: 4.0
                          memory length: 379491
                                                 epsilon: 0.4466058400105167
                                                                              steps: 297
                                                                                          lr: 1.60000000000000003e-05
episode: 1858
              score: 4.0
                          memory length: 379772
                                                 epsilon: 0.44604946001051315
                                                                              steps: 281
```

```
episode: 1859
                                                    epsilon: 0.445600000105103
                                                                                                 lr: 1.6000000000000003e-05
               score: 3.0
                            memory length: 379999
                                                                                   steps: 227
episode: 1860
               score: 2.0
                            memory length: 380198
                                                    epsilon: 0.4452059800105078
                                                                                                 lr: 1.6000000000000003e-05
                                                                                   steps: 199
episode: 1861
               score: 3.0
                            memory length: 380425
                                                    epsilon: 0.444756520010505
                                                                                  steps: 227
                                                                                                lr: 1.6000000000000003e-05
                                                                                                 lr: 1.6000000000000003e-05
episode: 1862
               score: 4.0
                            memory
                                   length: 380704
                                                    epsilon: 0.4442041000105015
                                                                                   steps: 279
episode: 1863
               score: 3.0
                            memory length: 380952
                                                    epsilon: 0.4437130600104984
                                                                                   steps: 248
                                                                                                 lr: 1.6000000000000003e-05
                            memory length: 381306
                                                    epsilon: 0.44301214001049394
                                                                                                  lr: 1.60000000000000003e-05
episode: 1864
               score: 6.0
                                                                                    steps: 354
                                                    epsilon: 0.4425626800104911
episode: 1865
               score: 3.0
                                   length: 381533
                                                                                   steps: 227
                                                                                                 lr: 1.60000000000000003e-05
                            memory
episode: 1866
               score: 6.0
                            memory length: 381906
                                                    epsilon: 0.4418241400104864
                                                                                   steps: 373
                                                                                                 lr: 1.60000000000000003e-05
episode: 1867
               score: 2.0
                            memory length: 382105
                                                    epsilon: 0.44143012001048393
                                                                                                  steps: 199
episode: 1868
                                                    epsilon: 0.4409806600104811
               score: 3.0
                            memory length: 382332
                                                                                   steps: 227
                                                                                                 lr: 1.60000000000000003e-05
episode: 1869
               score: 4.0
                            memory length: 382607
                                                    epsilon: 0.44043616001047764
                                                                                    steps: 275
                                                                                                  episode: 1870
               score: 4.0
                            memory length: 382865
                                                    epsilon: 0.4399253200104744
                                                                                   steps: 258
                                                                                                 lr: 1.60000000000000003e-05
episode: 1871
               score: 6.0
                            memory length: 383201
                                                    ensilon: 0.4392600400104702
                                                                                   steps: 336
                                                                                                 lr: 1.60000000000000003e-05
               score: 2.0
episode: 1872
                            memory length: 383402
                                                    epsilon: 0.4388620600104677
                                                                                   steps: 201
                                                                                                 lr: 1.6000000000000003e-05
episode: 1873
               score: 4.0
                                   length: 383657
                                                    epsilon: 0.4383571600104645
                                                                                   steps: 255
                                                                                                 lr: 1.6000000000000003e-05
                            memory
                            memory length: 383934
                                                                                  steps: 277
episode: 1874
               score: 4.0
                                                    epsilon: 0.437808700010461
                                                                                                lr: 1.60000000000000003e-05
                            memory length: 384280
                                                    epsilon: 0.4371236200104567
episode: 1875
               score: 5.0
                                                                                   steps: 346
                                                                                                 episode: 1876
               score: 3.0
                            memory
                                   length: 384509
                                                    epsilon: 0.4366702000104538
                                                                                   steps: 229
                                                                                                 lr: 1.60000000000000003e-05
episode: 1877
               score: 2.0
                            memory length: 384692
                                                    epsilon: 0.4363078600104515
                                                                                   steps: 183
                                                                                                 lr: 1.6000000000000003e-05
                            memory length: 385115
                                                    epsilon: 0.4354703200104462
episode: 1878
               score: 8.0
                                                                                   steps: 423
                                                                                                 lr: 1.60000000000000003e-05
episode: 1879
               score: 5.0
                            memory length: 385397
                                                    epsilon: 0.4349119600104427
                                                                                   steps: 282
                                                                                                 episode: 1880
               score: 3.0
                            memory length: 385644
                                                    epsilon: 0.4344229000104396
                                                                                   steps: 247
                                                                                                 lr: 1.6000000000000003e-05
                            memory length: 385972
episode: 1881
               score: 5.0
                                                    epsilon: 0.4337734600104355
                                                                                   steps: 328
                                                                                                 episode: 1882
               score: 3.0
                                   length: 386203
                                                    epsilon: 0.4333160800104326
                                                                                   steps: 231
                                                                                                 lr: 1.6000000000000003e-05
episode: 1883
               score: 3.0
                            memory length: 386434
                                                    epsilon: 0.4328587000104297
                                                                                   steps: 231
                                                                                                 lr: 1.60000000000000003e-05
episode: 1884
               score: 7.0
                            memory length: 386796
                                                    epsilon: 0.43214194001042516
                                                                                                  lr: 1.600000000000000000003e-05
                                                                                    steps: 362
episode: 1885
               score: 5.0
                                   length: 387106
                                                    epsilon: 0.4315281400104213
                                                                                   steps: 310
                                                                                                 1r: 1.6000000000000003e-05
                            memory
               score: 3.0
                            memory length: 387352
                                                                                   steps: 246
                                                                                                 lr: 1.6000000000000003e-05
episode: 1886
                                                    epsilon: 0.4310410600104182
episode: 1887
               score: 4.0
                            memory length: 387646
                                                    epsilon: 0.4304589400104145
                                                                                   steps: 294
                                                                                                 lr: 1.6000000000000003e-05
episode: 1888
               score: 5.0
                            memory length: 387933
                                                    epsilon: 0.4298906800104109
                                                                                   steps: 287
                                                                                                 lr: 1.60000000000000003e-05
                                                    epsilon: 0.42943726001040805
episode: 1889
               score: 3.0
                            memory length: 388162
                                                                                    steps: 229
                                                                                                  episode: 1890
               score: 2.0
                            memory
                                   length:
                                           388361
                                                    epsilon: 0.42904324001040556
                                                                                    steps: 199
                                                                                                     1.60000000000000003e-05
episode: 1891
               score: 7.0
                            memory length: 388789
                                                    epsilon: 0.4281958000104002
                                                                                   steps: 428
                                                                                                 lr: 1.6000000000000003e-05
                            memory length: 389163
episode: 1892
               score: 6.0
                                                    epsilon: 0.4274552800103955
                                                                                   steps: 374
                                                                                                 lr: 1.60000000000000003e-05
                                   length: 389392
                                                    epsilon: 0.42700186001039264
                                                                                                  episode: 1893
               score: 3.0
                            memory
                                                                                    steps: 229
               score: 5.0
                                                    epsilon: 0.4263979600103888
episode: 1894
                            memory length: 389697
                                                                                   steps: 305
                                                                                                 lr: 1.6000000000000003e-05
episode: 1895
                                   length: 389849
                                                    epsilon: 0.4260970000103869
                                                                                                 lr: 1.6000000000000003e-05
               score: 1.0
                            memory
                                                                                   steps: 152
                                   length: 390096
episode: 1896
               score: 3.0
                                                    epsilon: 0.4256079400103838
                                                                                                 lr: 1.6000000000000003e-05
                                                                                   steps: 247
episode: 1897
               score: 4.0
                            memory length: 390374
                                                    epsilon: 0.42505750001038034
                                                                                    steps: 278
                                                                                                  episode: 1898
               score: 6.0
                            memory length: 390728
                                                    epsilon: 0.4243565800103759
                                                                                   steps: 354
                                                                                                 lr: 1.6000000000000003e-05
episode: 1899
               score: 4.0
                                   length: 391012
                                                    epsilon: 0.42379426001037235
                                                                                    steps: 284
                                                                                                  lr: 1.60000000000000003e-05
                            memory
episode: 1900
               score: 6.0
                            memory length: 391367
                                                    epsilon: 0.4230913600103679
                                                                                   steps: 355
                                                                                                 lr: 1.60000000000000003e-05
               score: 6.0
episode: 1901
                            memory length: 391720
                                                    epsilon: 0.4223924200103635
                                                                                   steps: 353
                                                                                                 lr: 1.6000000000000003e-05
episode: 1902
               score: 5.0
                            memory length: 392044
                                                    ensilon: 0.4217509000103594
                                                                                   steps: 324
                                                                                                 lr: 1.60000000000000003e-05
               score: 3.0
episode: 1903
                            memory length: 392271
                                                    epsilon: 0.4213014400103566
                                                                                   steps: 227
                                                                                                 lr: 1.6000000000000003e-05
episode: 1904
               score: 3.0
                            memory
                                   length: 392498
                                                    epsilon: 0.42085198001035373
                                                                                    steps: 227
                                                                                                  episode: 1905
                            memory length: 392774
                                                                                   steps: 276
               score: 4.0
                                                    epsilon: 0.4203055000103503
                                                                                                 lr: 1.600000000000000003e-05
episode: 1906
               score: 4.0
                            memory length: 393054
                                                    epsilon: 0.41975110001034677
                                                                                    steps: 280
                                                                                                  episode: 1907
               score: 5.0
                            memory
                                   length: 393377
                                                    epsilon: 0.4191115600103427
                                                                                   steps: 323
                                                                                                 lr: 1.6000000000000003e-05
               score: 4.0
episode: 1908
                            memory length: 393653
                                                    epsilon: 0.41856508001033926
                                                                                    steps: 276
                                                                                                  episode: 1909
                                                    epsilon: 0.4179374200103353
               score: 4.0
                            memory length: 393970
                                                                                   steps: 317
                                                                                                 lr: 1.60000000000000003e-05
episode: 1910
               score: 6.0
                            memory
                                   length: 394306
                                                    epsilon: 0.4172721400103311
                                                                                   steps: 336
                                                                                                 lr: 1.6000000000000003e-05
episode: 1911
               score: 4.0
                            memory length: 394573
                                                    epsilon: 0.41674348001032774
                                                                                    steps: 267
                                                                                                  episode: 1912
               score: 4.0
                            memory length: 394849
                                                    epsilon: 0.4161970000103243
                                                                                   steps: 276
                                                                                                 lr: 1.6000000000000003e-05
episode: 1913
                                   length: 395146
               score: 5.0
                            memory
                                                    epsilon: 0.41560894001032056
                                                                                    steps: 297
                                                                                                  episode: 1914
               score: 8.0
                            memory length: 395591
                                                    epsilon: 0.414727840010315
                                                                                  steps: 445
                                                                                                lr: 1.6000000000000003e-05
episode: 1915
               score: 4.0
                            memory length: 395847
                                                    epsilon: 0.4142209600103118
                                                                                   steps: 256
                                                                                                 epsilon: 0.4137655600103089
episode: 1916
               score: 3.0
                            memory
                                   length: 396077
                                                                                   steps: 230
                                                                                                 1r: 1.6000000000000003e-05
episode: 1917
                            memory length: 396353
                                                    epsilon: 0.41321908001030544
                                                                                    steps: 276
                                                                                                  score: 4.0
episode: 1918
               score: 6.0
                                   length: 396711
                                                    epsilon: 0.41251024001030095
                                                                                    steps: 358
                                                                                                  memory
episode: 1919
               score: 4.0
                            memory length: 396954
                                                    epsilon: 0.4120291000102979
                                                                                   steps: 243
                                                                                                 lr: 1.60000000000000003e-05
episode: 1920
               score: 4.0
                            memory length: 397217
                                                    epsilon: 0.4115083600102946
                                                                                   steps: 263
                                                                                                 lr: 1.6000000000000003e-05
episode: 1921
               score: 3.0
                                   length: 397431
                                                    epsilon: 0.41108464001029194
                                                                                    steps: 214
                                                                                                  lr: 1.600000000000000000000e-05
                            memory
               score: 5.0
                            memory length: 397737
                                                    epsilon: 0.4104787600102881
                                                                                   steps: 306
                                                                                                 lr: 1.6000000000000003e-05
episode: 1922
episode: 1923
               score: 6.0
                            memory length: 398113
                                                    epsilon: 0.4097342800102834
                                                                                   steps: 376
                                                                                                 lr: 1.60000000000000003e-05
                                                    epsilon: 0.4093402600102809
episode: 1924
               score: 2.0
                                   length: 398312
                                                                                   steps: 199
                                                                                                 lr: 1.6000000000000003e-05
                            memory
               score: 4.0
                                                    epsilon: 0.4087739800102773
episode: 1925
                            memory length: 398598
                                                                                   steps: 286
                                                                                                 lr: 1.6000000000000003e-05
episode: 1926
               score: 4.0
                            memory length: 398873
                                                    epsilon: 0.40822948001027387
                                                                                    steps: 275
                                                                                                  length: 399104
episode: 1927
               score: 3.0
                                                    epsilon: 0.407772100010271
                                                                                  steps: 231
                                                                                                lr: 1.6000000000000003e-05
episode: 1928
               score: 6.0
                            memory length: 399473
                                                    epsilon: 0.40704148001026635
                                                                                    steps: 369
                                                                                                  episode: 1929
               score: 6.0
                            memory length: 399846
                                                    epsilon: 0.4063029400102617
                                                                                   steps: 373
                                                                                                 lr: 1.6000000000000003e-05
episode: 1930
               score: 3.0
                                   length: 400073
                                                    epsilon: 0.40585348001025884
                                                                                    steps: 227
                                                                                                  1r: 6.400000000000001e-06
                            memory
episode: 1931
               score: 7.0
                            memory length: 400499
                                                    epsilon: 0.4050100000102535
                                                                                   steps: 426
                                                                                                 lr: 6.40000000000001e-06
episode: 1932
               score: 3.0
                            memory length: 400729
                                                    epsilon: 0.4045546000102506
                                                                                   steps: 230
                                                                                                 lr: 6.400000000000001e-06
episode: 1933
               score: 5.0
                            memory length: 401020
                                                    epsilon: 0.403978420010247
                                                                                  steps: 291
                                                                                                lr: 6.400000000000001e-06
                                                    epsilon: 0.40349728001024393
episode: 1934
               score: 4.0
                            memory length: 401263
                                                                                    steps: 243
                                                                                                  lr: 6.40000000000001e-06
episode: 1935
               score: 2.0
                                   length: 401446
                                                    epsilon: 0.40313494001024164
                                                                                                      6.40000000000001e-06
                            memory
                                                                                    steps: 183
episode: 1936
               score: 4.0
                            memory length: 401740
                                                    epsilon: 0.40255282001023796
                                                                                    steps: 294
                                                                                                  lr: 6.400000000000001e-06
                                                    epsilon: 0.4020063400102345
episode: 1937
               score: 4.0
                            memory length: 402016
                                                                                   steps: 276
                                                                                                 lr: 6.400000000000001e-06
episode: 1938
               score: 4.0
                            memorv
                                   length: 402291
                                                    epsilon: 0.40146184001023105
                                                                                    steps: 275
                                                                                                  lr: 6.400000000000001e-06
episode: 1939
               score: 7.0
                            memory length: 402698
                                                    epsilon: 0.40065598001022595
                                                                                    steps: 407
                                                                                                  lr: 6.400000000000001e-06
                                                    epsilon: 0.39991348001022126
episode: 1940
               score: 6.0
                            memory length: 403073
                                                                                    steps: 375
                                                                                                  lr: 6.400000000000001e-06
                                                    epsilon: 0.39926404001021715
                                                                                                  lr: 6.400000000000001e-06
episode: 1941
               score: 5.0
                            memory
                                   length: 403401
                                                                                    steps: 328
episode: 1942
               score: 4.0
                            memory length: 403679
                                                    epsilon: 0.39871360001021366
                                                                                    steps: 278
                                                                                                  lr: 6.40000000000001e-06
                                                    epsilon: 0.3981057400102098
                                                                                   steps: 307
               score: 5.0
                            memory length: 403986
                                                                                                 lr: 6.400000000000001e-06
episode: 1943
```

```
epsilon: 0.3972979000102047
                                                                                                     lr: 6.40000000000001e-06
episode: 1944
                score: 7.0
                              memory length: 404394
                                                                                       steps: 408
episode: 1945
                score: 5.0
                              memory
                                     length: 404720
                                                       epsilon: 0.3966524200102006
                                                                                       steps: 326
                                                                                                     lr: 6.400000000000001e-06
episode: 1946
                score: 6.0
                              memory length: 405077
                                                       epsilon: 0.39594556001019615
                                                                                        steps: 357
                                                                                                       lr: 6.400000000000001e-06
episode: 1947
                                                       epsilon: 0.3950327800101904
                score: 9.0
                              memory length: 405538
                                                                                       steps: 461
                                                                                                     lr: 6.400000000000001e-06
episode: 1948
                score: 6.0
                                     length: 405874
                                                       epsilon: 0.39436750001018617
                                                                                                       lr: 6.40000000000001e-06
                              memory
                                                                                        steps: 336
                score: 5.0
                              memory length: 406201
                                                       epsilon: 0.39372004001018207
episode: 1949
                                                                                        steps: 327
                                                                                                       1r: 6.400000000000001e-06
                              memory length: 406477
                                                                                       steps: 276
episode: 1950
                score: 4.0
                                                       epsilon: 0.3931735600101786
                                                                                                     lr: 6.400000000000001e-06
                                                       epsilon: 0.3926944000101756
episode: 1951
                score: 4.0
                              memory length: 406719
                                                                                       steps: 242
                                                                                                     lr: 6.400000000000001e-06
episode: 1952
                score: 3.0
                              memory length: 406948
                                                       epsilon: 0.3922409800101727
                                                                                       steps: 229
                                                                                                     lr: 6.400000000000001e-06
episode: 1953
                score: 5.0
                              memory length: 407239
                                                       epsilon: 0.39166480001016907
                                                                                        steps: 291
                                                                                                       lr: 6.40000000000001e-06
episode: 1954
                                                       epsilon: 0.39110644001016553
                score: 4.0
                              memory length: 407521
                                                                                        steps: 282
                                                                                                       lr: 6.400000000000001e-06
episode: 1955
                score: 6.0
                              memory length: 407857
                                                       epsilon: 0.3904411600101613
                                                                                       steps: 336
                                                                                                     lr: 6.400000000000001e-06
episode: 1956
                score: 5.0
                              memory
                                     length: 408201
                                                       epsilon: 0.389760040010157
                                                                                      steps: 344
                                                                                                     lr: 6.400000000000001e-06
episode: 1957
                score: 4.0
                              memory length: 408457
                                                       epsilon: 0.3892531600101538
                                                                                       steps: 256
                                                                                                     lr: 6.400000000000001e-06
                                                       epsilon: 0.3887462800101506
episode: 1958
                score: 4.0
                              memory length: 408713
                                                                                       steps: 256
                                                                                                     lr: 6.400000000000001e-06
episode: 1959
                score: 4.0
                              memory
                                     length: 408990
                                                       epsilon: 0.38819782001014713
                                                                                        steps: 277
                                                                                                       lr: 6.40000000000001e-06
                              memory length: 409282
                score: 5.0
                                                       epsilon: 0.3876196600101435
                                                                                       steps: 292
                                                                                                     lr: 6.400000000000001e-06
episode: 1960
                              memory length: 409627
episode: 1961
                score: 5.0
                                                       epsilon: 0.38693656001013915
                                                                                        steps: 345
                                                                                                       lr: 6.400000000000001e-06
episode: 1962
                score: 3.0
                              memory
                                     length: 409858
                                                       epsilon: 0.38647918001013626
                                                                                        steps: 231
                                                                                                       lr: 6.400000000000001e-06
                score: 7.0
                                                       epsilon: 0.3857069800101314
episode: 1963
                              memory length: 410248
                                                                                       steps: 390
                                                                                                     lr: 6.400000000000001e-06
                                                                                        steps: 258
episode: 1964
                score: 4.0
                              memory length: 410506
                                                       ensilon: 0.38519614001012814
                                                                                                      lr: 6.400000000000001e-06
                                                       epsilon: 0.3846239200101245
episode: 1965
                score: 5.0
                              memory length: 410795
                                                                                       steps: 289
                                                                                                     lr: 6.400000000000001e-06
episode: 1966
                score: 5.0
                              memory length: 411122
                                                       epsilon: 0.3839764600101204
                                                                                       steps: 327
                                                                                                     lr: 6.400000000000001e-06
episode: 1967
                score: 6.0
                              memory length: 411479
                                                       epsilon: 0.38326960001011595
                                                                                        steps: 357
                                                                                                      lr: 6.400000000000001e-06
                                                       epsilon: 0.3826261000101119
episode: 1968
                score: 5.0
                              memory length: 411804
                                                                                       steps: 325
                                                                                                     lr: 6.400000000000001e-06
episode: 1969
                score: 4.0
                              memory length: 412064
                                                       epsilon: 0.3821113000101086
                                                                                       steps: 260
                                                                                                     lr: 6.400000000000001e-06
episode: 1970
                                     length: 412293
                                                                                        steps: 229
                score: 3.0
                                                       epsilon: 0.38165788001010575
                                                                                                       1r: 6.400000000000001e-06
                              memory
episode: 1971
                                     length: 412524
                                                                                        steps: 231
                score: 3.0
                              memory
                                                       epsilon: 0.38120050001010286
                                                                                                       lr: 6.400000000000001e-06
episode: 1972
                score: 3.0
                              memory length: 412753
                                                       epsilon: 0.3807470800101
                                                                                    steps: 229
                                                                                                  lr: 6.400000000000001e-06
episode: 1973
                score: 2.0
                              memory length: 412954
                                                       epsilon: 0.3803491000100975
                                                                                       steps: 201
                                                                                                     lr: 6.400000000000001e-06
                                                                                      steps: 279
episode: 1974
                score: 4.0
                              memory length: 413233
                                                       epsilon: 0.379796680010094
                                                                                                     lr: 6.400000000000001e-06
episode: 1975
                score: 3.0
                              memory length: 413483
                                                       epsilon: 0.37930168001009085
                                                                                        steps: 250
                                                                                                       lr: 6.400000000000001e-06
episode: 1976
                score: 3.0
                              memory
                                     length: 413717
                                                       epsilon: 0.3788383600100879
                                                                                       steps: 234
                                                                                                     lr: 6.400000000000001e-06
episode: 1977
                score: 6.0
                              memory length: 414075
                                                       epsilon: 0.37812952001008343
                                                                                        steps: 358
                                                                                                      lr: 6.400000000000001e-06
episode: 1978
                score: 3.0
                              memory length: 414303
                                                       epsilon: 0.3776780800100806
                                                                                       steps: 228
                                                                                                     lr: 6.400000000000001e-06
                                                       epsilon: 0.3769751800100761
episode: 1979
                                                                                                     lr: 6.400000000000001e-06
                score: 6.0
                              memory
                                     length: 414658
                                                                                       steps: 355
episode: 1980
                score: 6.0
                              memory length: 414992
                                                       epsilon: 0.37631386001007194
                                                                                                       lr: 6.40000000000001e-06
                                                                                        steps: 334
episode: 1981
                score: 2.0
                              memory length: 415193
                                                       epsilon: 0.3759158800100694
                                                                                       steps: 201
                                                                                                     lr: 6.400000000000001e-06
episode: 1982
                score: 3.0
                              memory length: 415425
                                                       epsilon: 0.3754565200100665
                                                                                       steps: 232
                                                                                                     lr: 6.400000000000001e-06
episode: 1983
                score: 6.0
                              memory length: 415798
                                                       epsilon: 0.37471798001006185
                                                                                        steps: 373
                                                                                                       lr: 6.40000000000001e-06
episode: 1984
                score: 8.0
                              memory length: 416077
                                                       epsilon: 0.37416556001005835
                                                                                        steps: 279
                                                                                                       lr: 6.400000000000001e-06
episode: 1985
                score: 5.0
                              memory length: 416422
                                                       epsilon: 0.37348246001005403
                                                                                        steps: 345
                                                                                                       1r: 6.400000000000001e-06
                                                                                       steps: 280
episode: 1986
                score: 4.0
                              memory length: 416702
                                                       epsilon: 0.3729280600100505
                                                                                                     lr: 6.40000000000001e-06
episode: 1987
                score: 5.0
                              memory length: 417027
                                                       epsilon: 0.37228456001004645
                                                                                        steps: 325
                                                                                                      lr: 6.40000000000001e-06
episode: 1988
                score: 6.0
                              memory length: 417350
                                                       epsilon: 0.3716450200100424
                                                                                       steps: 323
                                                                                                     lr: 6.400000000000001e-06
                                                       epsilon: 0.3711520000100393
episode: 1989
                score: 3.0
                              memory length: 417599
                                                                                       steps: 249
                                                                                                     lr: 6.400000000000001e-06
episode: 1990
                score: 4.0
                                     length: 417874
                                                       epsilon: 0.37060750001003584
                                                                                        steps: 275
                                                                                                       lr: 6.40000000000001e-06
                              memory
episode: 1991
                score: 3.0
                              memory length: 418104
                                                       epsilon: 0.37015210001003296
                                                                                        steps: 230
                                                                                                       lr: 6.400000000000001e-06
episode: 1992
                score: 6.0
                              memory length: 418478
                                                       epsilon: 0.3694115800100283
                                                                                       steps: 374
                                                                                                     lr: 6.400000000000001e-06
episode: 1993
                score: 7.0
                              memory
                                     length: 418848
                                                       epsilon: 0.36867898001002364
                                                                                        steps: 370
                                                                                                       lr: 6.400000000000001e-06
episode: 1994
                score: 3.0
                              memory length: 419078
                                                       epsilon: 0.36822358001002076
                                                                                        steps: 230
                                                                                                       lr: 6.400000000000001e-06
episode: 1995
                score: 4.0
                              memory length: 419353
                                                       epsilon: 0.3676790800100173
                                                                                       steps: 275
                                                                                                     lr: 6.400000000000001e-06
                                                       epsilon: 0.36716428001001405
episode: 1996
                score: 4.0
                              memory length: 419613
                                                                                        steps: 260
                                                                                                       lr: 6.400000000000001e-06
episode: 1997
                score: 6.0
                              memory length: 419989
                                                       epsilon: 0.36641980001000934
                                                                                        steps: 376
                                                                                                       lr: 6.40000000000001e-06
episode: 1998
                score: 7.0
                              memory length: 420339
                                                       epsilon: 0.36572680001000496
                                                                                        steps: 350
                                                                                                       lr: 6.400000000000001e-06
episode: 1999
                score: 6.0
                                     length: 420676
                                                       epsilon: 0.36505954001000074
                                                                                        steps: 337
                                                                                                       lr: 6.400000000000001e-06
                              memory
                                                                                       steps: 400
episode: 2000
                score: 7.0
                              memory length: 421076
                                                       epsilon: 0.3642675400099957
                                                                                                     lr: 6.400000000000001e-06
episode: 2001
                score: 4.0
                              memory length: 421374
                                                       epsilon: 0.363677500009992
                                                                                      steps: 298
                                                                                                     lr: 6.40000000000001e-06
                                                       epsilon: 0.36316270000998874
episode: 2002
                score: 4.0
                                     length: 421634
                                                                                        steps: 260
                                                                                                       1r: 6.400000000000001e-06
                              memory
                                                                                        steps: 319
                                                                                                       lr: 6.400000000000001e-06
episode: 2003
                score: 6.0
                              memory length: 421953
                                                       epsilon: 0.36253108000998474
episode: 2004
                score: 4.0
                              memory length: 422229
                                                       epsilon: 0.3619846000099813
                                                                                       steps: 276
                                                                                                     lr: 6.400000000000001e-06
                              memory length: 422492
episode: 2005
                score: 4.0
                                                                                      steps: 263
                                                       epsilon: 0.361463860009978
                                                                                                     lr: 6.400000000000001e-06
episode: 2006
                score: 3.0
                              memory length: 422702
                                                       epsilon: 0.36104806000997536
                                                                                        steps: 210
                                                                                                       lr: 6.400000000000001e-06
episode: 2007
                score: 8.0
                              memory
                                     length: 423178
                                                       epsilon: 0.3601055800099694
                                                                                       steps: 476
                                                                                                     lr: 6.400000000000001e-06
                score: 5.0
episode: 2008
                              memory length: 423469
                                                       epsilon: 0.35952940000996575
                                                                                        steps: 291
                                                                                                       lr: 6.400000000000001e-06
episode: 2009
                                                       epsilon: 0.3588878800099617
                score: 5.0
                              memory length: 423793
                                                                                       steps: 324
                                                                                                     lr: 6.400000000000001e-06
episode: 2010
                score: 8.0
                              memory
                                     length: 424228
                                                       epsilon: 0.35802658000995624
                                                                                        steps: 435
                                                                                                       lr: 6.400000000000001e-06
episode: 2011
                score: 5.0
                                                       epsilon: 0.35738308000995217
                                                                                        steps: 325
                              memory length: 424553
                                                                                                       lr: 6.400000000000001e-06
                              memory length: 424956
episode: 2012
                score: 7.0
                                                       epsilon: 0.3565851400099471
                                                                                       steps: 403
                                                                                                     lr: 6.400000000000001e-06
episode: 2013
                score: 6.0
                                     length: 425298
                                                       epsilon: 0.35590798000994284
                                                                                        steps: 342
                                                                                                       lr: 6.40000000000001e-06
                              memory
episode: 2014
                score: 7.0
                              memory length: 425705
                                                       epsilon: 0.35510212000993774
                                                                                        steps: 407
                                                                                                       lr: 6.40000000000001e-06
episode: 2015
                score: 5.0
                              memory length: 426032
                                                       epsilon: 0.35445466000993364
                                                                                        steps: 327
                                                                                                       lr: 6.400000000000001e-06
episode: 2016
                score: 6.0
                                     length: 426392
                                                       epsilon: 0.35374186000992913
                                                                                        steps: 360
                                                                                                       1r: 6.400000000000001e-06
                              memory
                                                                                       steps: 291
episode: 2017
                score: 5.0
                              memory length: 426683
                                                       epsilon: 0.3531656800099255
                                                                                                     lr: 6.40000000000001e-06
episode: 2018
                score: 5.0
                              memory length: 426988
                                                       epsilon: 0.35256178000992167
                                                                                        steps: 305
                                                                                                       lr: 6.40000000000001e-06
episode: 2019
                score: 6.0
                              memory length: 427313
                                                       epsilon: 0.3519182800099176
                                                                                       steps: 325
                                                                                                     lr: 6.400000000000001e-06
                                                       epsilon: 0.35132626000991385
episode: 2020
                score: 4.0
                              memory length: 427612
                                                                                        steps: 299
                                                                                                      lr: 6.400000000000001e-06
episode: 2021
                score: 3.0
                                     length: 427859
                                                       epsilon: 0.35083720000991075
                                                                                        steps: 247
                                                                                                          6.40000000000001e-06
                              memorv
episode: 2022
                score: 5.0
                              memory length: 428193
                                                       epsilon: 0.35017588000990657
                                                                                        steps: 334
                                                                                                       lr: 6.400000000000001e-06
episode: 2023
                              memory length: 428469
                score: 4.0
                                                       epsilon: 0.3496294000099031
                                                                                       steps: 276
                                                                                                     lr: 6.400000000000001e-06
episode: 2024
                score: 6.0
                              memory
                                     length: 428816
                                                       epsilon: 0.34894234000989877
                                                                                        steps: 347
                                                                                                       lr: 6.400000000000001e-06
episode: 2025
                score: 7.0
                                                      epsilon: 0.3481424200098937
                                                                                       steps: 404
                              memory length: 429220
                                                                                                     lr: 6.400000000000001e-06
episode: 2026
                score: 4.0
                              memory length: 429521
                                                       epsilon: 0.34754644000988993
                                                                                        steps: 301
                                                                                                      lr: 6.400000000000001e-06
                                                       epsilon: 0.3471306400098873
                                                                                                     lr: 6.400000000000001e-06
                                                                                       steps: 210
episode: 2027
                score: 3.0
                              memory length: 429731
episode: 2028
                score: 9.0
                              memory length: 430200
                                                       epsilon: 0.34620202000988143
                                                                                        steps: 469
                                                                                                       lr: 6.400000000000001e-06
```

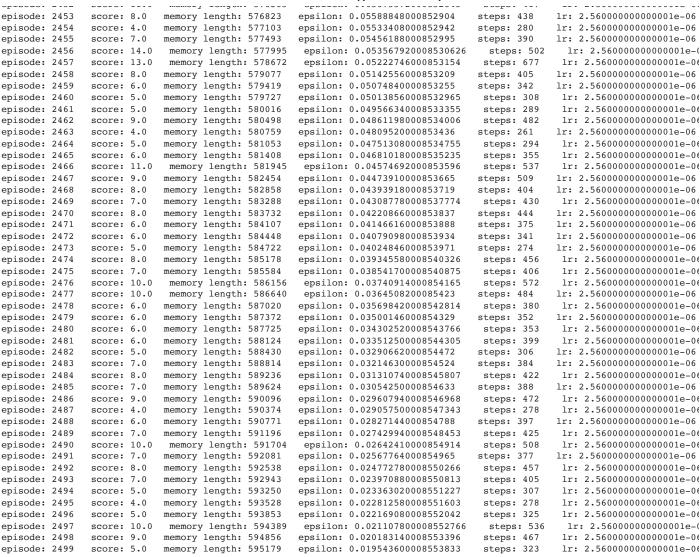
```
episode: 2029
                score: 4.0
                             memory length: 430482
                                                      epsilon: 0.3456436600098779
                                                                                      steps: 282
                                                                                                     lr: 6.400000000000001e-06
episode: 2030
                score: 3.0
                             memory length: 430713
                                                      epsilon: 0.345186280009875
                                                                                      steps: 231
                                                                                                    1r: 6.400000000000001e-06
                                                      epsilon: 0.34470514000987196
                                                                                                      lr: 6.400000000000001e-06
                score:
                                                                                        steps: 243
episode: 2031
                       4.0
                              memory
                                     length: 430956
episode: 2032
                score: 6.0
                                                                                       steps: 348
                             memory length: 431304
                                                      epsilon: 0.3440161000098676
                                                                                                     lr: 6.400000000000001e-06
episode: 2033
                score: 6.0
                             memory length: 431665
                                                      ensilon: 0.3433013200098631
                                                                                       steps: 361
                                                                                                     lr: 6.400000000000001e-06
                score: 5.0
episode: 2034
                                     length: 431970
                                                       epsilon: 0.34269742000985925
                                                                                                      lr: 6.40000000000001e-06
                              memory
                                                                                        steps: 305
episode: 2035
                score: 6.0
                              memory length: 432311
                                                      epsilon: 0.342022240009855
                                                                                      steps: 341
                                                                                                    lr: 6.400000000000001e-06
episode: 2036
                score: 3.0
                             memory length: 432541
                                                      epsilon: 0.3415668400098521
                                                                                      steps: 230
                                                                                                     lr: 6.400000000000001e-06
                                                      epsilon: 0.34097482000984836
episode: 2037
                score: 4.0
                             memory length: 432840
                                                                                        steps: 299
                                                                                                      lr: 6.400000000000001e-06
episode: 2038
                score: 6.0
                              memory length: 433204
                                                      epsilon: 0.3402541000098438
                                                                                       steps: 364
                                                                                                     lr: 6.400000000000001e-06
episode: 2039
                score: 5.0
                             memory length: 433511
                                                      epsilon: 0.33964624000983995
                                                                                       steps: 307
                                                                                                      lr: 6.400000000000001e-06
                                                      epsilon: 0.3390403600098361
episode: 2040
                score: 5.0
                             memory length: 433817
                                                                                       steps: 306
                                                                                                     lr: 6.400000000000001e-06
                                                                                                      lr: 6.40000000000001e-06
episode: 2041
                score: 5.0
                              memory length: 434124
                                                      epsilon: 0.33843250000983227
                                                                                        steps: 307
episode: 2042
                score: 5.0
                              memory
                                     length: 434413
                                                      epsilon: 0.33786028000982865
                                                                                        steps: 289
                                                                                                          6.400000000000001e-06
episode: 2043
                score: 5.0
                             memory length: 434723
                                                      epsilon: 0.33724648000982477
                                                                                        steps: 310
                                                                                                      lr: 6.400000000000001e-06
episode: 2044
                score: 4.0
                              memory length: 434984
                                                       epsilon: 0.3367297000098215
                                                                                       steps: 261
                                                                                                     lr: 6.400000000000001e-06
episode: 2045
                score: 6.0
                              memorv
                                     length: 435360
                                                      epsilon: 0.3359852200098168
                                                                                       steps: 376
                                                                                                     lr: 6.400000000000001e-06
episode: 2046
                score: 2.0
                                                                                        steps: 201
                             memory length: 435561
                                                      epsilon: 0.33558724000981427
                                                                                                      lr: 6.400000000000001e-06
episode: 2047
                                                      epsilon: 0.33491008000981
                score: 6.0
                             memory length: 435903
                                                                                    steps: 342
                                                                                                   lr: 6.400000000000001e-06
episode: 2048
                score: 5.0
                              memory
                                     length: 436231
                                                      epsilon: 0.3342606400098059
                                                                                       steps: 328
                                                                                                     lr: 6.400000000000001e-06
episode: 2049
                score: 5.0
                             memory length: 436560
                                                      epsilon: 0.33360922000980175
                                                                                       steps: 329
                                                                                                      lr: 6.400000000000001e-06
episode: 2050
                                                                                      steps: 258
                score: 4.0
                             memory length: 436818
                                                      epsilon: 0.3330983800097985
                                                                                                     lr: 6.400000000000001e-06
                                                      epsilon: 0.332381620009794
episode: 2051
                score: 7.0
                             memory length: 437180
                                                                                      steps: 362
                                                                                                    lr: 6.400000000000001e-06
episode: 2052
                score: 8.0
                              memory length: 437614
                                                      epsilon: 0.33152230000978855
                                                                                        steps: 434
                                                                                                      lr: 6.40000000000001e-06
episode: 2053
                score: 9.0
                             memory length: 438089
                                                      epsilon: 0.3305818000097826
                                                                                      steps: 475
                                                                                                     lr: 6.400000000000001e-06
episode: 2054
                                                      epsilon: 0.33003532000977914
                score: 4.0
                             memory length: 438365
                                                                                        steps: 276
                                                                                                      lr: 6.400000000000001e-06
episode: 2055
                score: 4.0
                              memory length: 438625
                                                      epsilon: 0.3295205200097759
                                                                                       steps: 260
                                                                                                     lr: 6.40000000000001e-06
episode: 2056
                                     length: 438934
                                                      epsilon: 0.328908700009772
                                                                                                    lr: 6.400000000000001e-06
                score: 5.0
                                                                                      steps: 309
                             memory
episode: 2057
                score: 4.0
                                     length: 439177
                                                      epsilon: 0.32842756000976897
                                                                                        steps: 243
                                                                                                      lr: 6.40000000000001e-06
                             memory
                                                      epsilon: 0.3277880200097649
episode: 2058
                score: 5.0
                              memory length: 439500
                                                                                       steps: 323
                                                                                                     lr: 6.400000000000001e-06
episode: 2059
                score: 6.0
                                     length: 439877
                                                      epsilon: 0.3270415600097602
                                                                                       steps: 377
                                                                                                     lr: 6.400000000000001e-06
                              memory
episode: 2060
                score: 4.0
                             memory length: 440160
                                                      epsilon: 0.32648122000975666
                                                                                       steps: 283
                                                                                                      lr: 6.400000000000001e-06
episode: 2061
                                                                                                     lr: 6.40000000000001e-06
                score: 2.0
                              memory length: 440341
                                                       epsilon: 0.3261228400097544
                                                                                       steps: 181
episode: 2062
                score: 4.0
                              memory
                                     length: 440622
                                                      epsilon: 0.32556646000975087
                                                                                        steps: 281
                                                                                                      lr: 6.400000000000001e-06
                score: 7.0
                                                      epsilon: 0.32475862000974576
                                                                                        steps: 408
episode: 2063
                             memory length: 441030
                                                                                                      lr: 6.400000000000001e-06
episode: 2064
                score: 5.0
                             memory length: 441336
                                                      ensilon: 0.3241527400097419
                                                                                       steps: 306
                                                                                                     lr: 6.400000000000001e-06
                                     length: 441615
                                                      epsilon: 0.32360032000973843
                                                                                                      lr: 6.40000000000001e-06
episode: 2065
                score: 4.0
                              memory
                                                                                        steps: 279
                                                      epsilon: 0.32298454000973453
episode: 2066
                score: 5.0
                             memory length: 441926
                                                                                                      lr: 6.400000000000001e-06
                                                                                        steps: 311
episode: 2067
                             memory length: 442236
                score: 5.0
                                                      epsilon: 0.32237074000973065
                                                                                        steps: 310
                                                                                                      lr: 6.400000000000001e-06
episode: 2068
                score: 4.0
                             memory length: 442495
                                                      epsilon: 0.3218579200097274
                                                                                       steps: 259
                                                                                                     lr: 6.400000000000001e-06
                                                      epsilon: 0.3211154200097227
                                                                                                     lr: 6.400000000000001e-06
episode: 2069
                score: 6.0
                              memory length: 442870
                                                                                       steps: 375
episode: 2070
                             memory length: 443293
                                                      epsilon: 0.3202778800097174
                                                                                                     lr: 6.400000000000001e-06
                score: 7.0
                                                                                      steps: 423
episode: 2071
                score: 5.0
                             memory length: 443619
                                                      epsilon: 0.3196324000097133
                                                                                       steps: 326
                                                                                                     lr: 6.400000000000001e-06
                                                                                                      lr: 6.400000000000001e-06
episode: 2072
                              memory length: 443928
                                                      epsilon: 0.31902058000970945
                score: 5.0
                                                                                        steps: 309
episode: 2073
                score: 5.0
                              memory length: 444216
                                                      epsilon: 0.31845034000970585
                                                                                        steps: 288
                                                                                                          6.40000000000001e-06
episode: 2074
                score: 3.0
                             memory length: 444448
                                                      epsilon: 0.31799098000970294
                                                                                        steps: 232
                                                                                                      lr: 6.400000000000001e-06
                                                      epsilon: 0.3175712200097003
episode: 2075
                score: 3.0
                              memory length: 444660
                                                                                       steps: 212
                                                                                                     lr: 6.400000000000001e-06
episode: 2076
                score: 4.0
                              memory
                                     length: 444919
                                                      epsilon: 0.31705840000969704
                                                                                        steps: 259
                                                                                                      lr: 6.40000000000001e-06
episode: 2077
                score: 6.0
                             memory length: 445230
                                                      epsilon: 0.31644262000969314
                                                                                        steps: 311
                                                                                                      lr: 6.400000000000001e-06
episode: 2078
                                                      epsilon: 0.3157397200096887
                score: 6.0
                             memory length: 445585
                                                                                       steps: 355
                                                                                                     lr: 6.400000000000001e-06
episode: 2079
                score: 8.0
                              memory
                                     length: 446027
                                                      epsilon: 0.31486456000968316
                                                                                        steps: 442
                                                                                                      lr: 6.400000000000001e-06
episode: 2080
                score: 4.0
                                                      epsilon: 0.3143834200096801
                                                                                       steps: 243
                             memory length: 446270
                                                                                                     lr: 6.400000000000001e-06
episode: 2081
                score: 5.0
                             memory length: 446577
                                                      epsilon: 0.31377556000967627
                                                                                        steps: 307
                                                                                                      lr: 6.400000000000001e-06
                                                      epsilon: 0.3132231400096728
episode: 2082
                score: 4.0
                             memory length: 446856
                                                                                       steps: 279
                                                                                                     lr: 6.400000000000001e-06
episode: 2083
                score: 6.0
                              memory length: 447196
                                                      epsilon: 0.3125499400096685
                                                                                       steps: 340
                                                                                                     lr: 6.400000000000001e-06
episode: 2084
                score: 3.0
                             memory length: 447426
                                                      epsilon: 0.31209454000966563
                                                                                                      lr: 6.400000000000001e-06
                                                                                       steps: 230
episode: 2085
                                                      epsilon: 0.3114530200096616
                score: 5.0
                             memory length: 447750
                                                                                       steps: 324
                                                                                                     lr: 6.400000000000001e-06
episode: 2086
                score: 6.0
                              memory length: 448094
                                                      epsilon: 0.31077190000965726
                                                                                        steps: 344
                                                                                                      lr: 6.400000000000001e-06
episode: 2087
                score: 6.0
                             memory length: 448475
                                                      epsilon: 0.3100175200096525
                                                                                                     lr: 6.400000000000001e-06
                                                                                      steps: 381
episode: 2088
                                                       epsilon: 0.3089463400096457
                score: 13.0
                              memory length: 449016
                                                                                        steps: 541
                                                                                                      1r: 6.400000000000001e-06
episode: 2089
                score: 6.0
                              memory length: 449355
                                                       epsilon: 0.30827512000964147
                                                                                        steps: 339
                                                                                                      lr: 6.400000000000001e-06
episode: 2090
                score: 6.0
                              memory length: 449748
                                                      epsilon: 0.30749698000963654
                                                                                        steps: 393
                                                                                                      lr: 6.40000000000001e-06
episode: 2091
                             memory length: 449958
                                                      epsilon: 0.3070811800096339
                                                                                       steps: 210
                score: 3.0
                                                                                                     lr: 6.400000000000001e-06
episode: 2092
                                                                                                      lr: 6.40000000000001e-06
                score: 4.0
                              memory length: 450220
                                                      epsilon: 0.30656242000963063
                                                                                        steps: 262
episode: 2093
                score: 4.0
                              memory
                                     length: 450476
                                                      epsilon: 0.3060555400096274
                                                                                       steps: 256
                                                                                                     lr: 6.40000000000001e-06
episode: 2094
                score: 4.0
                             memory length: 450751
                                                      epsilon: 0.305511040009624
                                                                                      steps: 275
                                                                                                    lr: 6.40000000000001e-06
episode: 2095
                score: 4.0
                             memory length: 451010
                                                       epsilon: 0.30499822000962074
                                                                                        steps: 259
                                                                                                      lr: 6.400000000000001e-06
episode: 2096
                score: 12.0
                               memory length: 451582
                                                       epsilon: 0.30386566000961357
                                                                                         steps: 572
                                                                                                       lr: 6.400000000000001e-06
episode: 2097
                score: 8.0
                             memory length: 452014
                                                      epsilon: 0.30301030000960816
                                                                                        steps: 432
                                                                                                      lr: 6.400000000000001e-06
episode: 2098
                score: 4.0
                             memory length: 452290
                                                      epsilon: 0.3024638200096047
                                                                                      steps: 276
                                                                                                     lr: 6.400000000000001e-06
                                                      epsilon: 0.30177874000960037
episode: 2099
                score: 9.0
                             memory length: 452636
                                                                                        steps: 346
                                                                                                      lr: 6.400000000000001e-06
episode: 2100
                score: 10.0
                               memory length: 453089
                                                       epsilon: 0.3008818000095947
                                                                                        steps: 453
                                                                                                      lr: 6.400000000000001e-06
episode: 2101
                score: 5.0
                             memory length: 453389
                                                      epsilon: 0.30028780000959093
                                                                                        steps: 300
                                                                                                      lr: 6.400000000000001e-06
                             memory length: 453696
episode: 2102
                score: 5.0
                                                      epsilon: 0.2996799400095871
                                                                                       steps: 307
                                                                                                     lr: 6.400000000000001e-06
episode: 2103
                score: 6.0
                              memory length: 454046
                                                      epsilon: 0.2989869400095827
                                                                                       steps: 350
                                                                                                     lr: 6.40000000000001e-06
episode: 2104
                score: 3.0
                             memory length: 454297
                                                      epsilon: 0.29848996000957956
                                                                                       steps: 251
                                                                                                      lr: 6.40000000000001e-06
                                                                                       steps: 258
episode: 2105
                score: 4.0
                             memory length: 454555
                                                      epsilon: 0.2979791200095763
                                                                                                     lr: 6.400000000000001e-06
episode: 2106
                score: 5.0
                              memory length: 454884
                                                       epsilon: 0.2973277000095722
                                                                                       steps: 329
                                                                                                     lr: 6.40000000000001e-06
                                     length: 455209
episode: 2107
                score: 5.0
                              memorv
                                                      epsilon: 0.29668420000956813
                                                                                        steps: 325
                                                                                                      lr: 6.400000000000001e-06
                             memory length: 455540
                                                                                      steps: 331
episode: 2108
                score: 5.0
                                                      epsilon: 0.296028820009564
                                                                                                    lr: 6.400000000000001e-06
episode: 2109
                score: 4.0
                             memory length: 455822
                                                      epsilon: 0.29547046000956045
                                                                                        steps: 282
                                                                                                      lr: 6.400000000000001e-06
                score: 5.0
                                                                                                     lr: 6.400000000000001e-06
episode: 2110
                              memory
                                     length: 456131
                                                       epsilon: 0.2948586400095566
                                                                                       steps: 309
episode: 2111
                score: 9.0
                                                      epsilon: 0.29390428000955054
                                                                                        steps: 482
                                                                                                      lr: 6.400000000000001e-06
                             memory length: 456613
episode: 2112
                score: 4.0
                             memory length: 456856
                                                      epsilon: 0.2934231400095475
                                                                                       steps: 243
                                                                                                     lr: 6.400000000000001e-06
onicodo. 2112
                                     long+h. 457116
                                                        mailam. A 2020A024AAAA
```

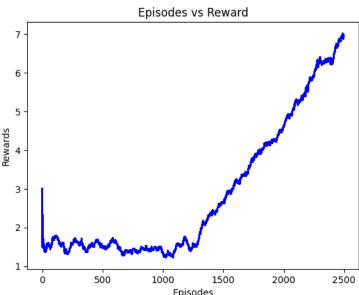
```
episode: Ziis
                score: 4.0
                              memory rength: 45/110
                                                       epsiton: 0.29290034000934424
                                                                                        steps: 200
                                                                                                       11: 0.4000000000000001e-00
episode: 2114
                score: 5.0
                              memorv
                                     length: 457445
                                                       epsilon: 0.2922569200095401
                                                                                       steps: 329
                                                                                                     lr: 6.400000000000001e-06
episode: 2115
                score: 4.0
                              memory length: 457707
                                                      epsilon: 0.29173816000953684
                                                                                        steps: 262
                                                                                                      lr: 6.400000000000001e-06
                              memory length: 457957
                                                       epsilon: 0.2912431600095337
episode: 2116
                score: 3.0
                                                                                       steps: 250
                                                                                                     lr: 6.400000000000001e-06
episode: 2117
                                                                                                     lr: 6.400000000000001e-06
                score: 5.0
                              memory
                                     length: 458261
                                                       epsilon: 0.2906412400095299
                                                                                       steps: 304
                                                                                        steps: 290
episode: 2118
                score: 5.0
                              memory length: 458551
                                                       epsilon: 0.29006704000952627
                                                                                                      lr: 6.40000000000001e-06
episode: 2119
                              memory length: 458938
                score: 7.0
                                                       epsilon: 0.2893007800095214
                                                                                       steps: 387
                                                                                                     lr: 6.400000000000001e-06
episode: 2120
                score: 6.0
                                     length: 459276
                                                       epsilon: 0.2886315400095172
                                                                                       steps: 338
                                                                                                     lr: 6.40000000000001e-06
                              memory
episode: 2121
                score: 8.0
                              memory length: 459687
                                                       epsilon: 0.28781776000951204
                                                                                        steps: 411
                                                                                                       lr: 6.40000000000001e-06
                              memory length: 460093
episode: 2122
                score: 8.0
                                                       epsilon: 0.28701388000950695
                                                                                        steps: 406
                                                                                                       lr: 6.400000000000001e-06
episode: 2123
                score: 5.0
                              memory length: 460397
                                                       epsilon: 0.28641196000950314
                                                                                        steps: 304
                                                                                                       lr: 6.400000000000001e-06
                                                                                                     lr: 6.400000000000001e-06
episode: 2124
                                                       epsilon: 0.2859625000095003
                                                                                       steps: 227
                score: 3.0
                              memory length: 460624
episode: 2125
                                                       epsilon: 0.2855051200094974
                score: 3.0
                              memory length: 460855
                                                                                       steps: 231
                                                                                                     lr: 6.400000000000001e-06
episode: 2126
                score: 5.0
                              memory length: 461159
                                                       ensilon: 0.2849032000094936
                                                                                       steps: 304
                                                                                                     lr: 6.400000000000001e-06
                                                       epsilon: 0.28413694000948875
episode: 2127
                                                                                                       lr: 6.40000000000001e-06
                score: 7.0
                              memory length: 461546
                                                                                        steps: 387
episode: 2128
                score: 4.0
                              memory
                                     length: 461822
                                                       epsilon: 0.2835904600094853
                                                                                       steps: 276
                                                                                                      lr: 6.400000000000001e-06
episode: 2129
                score: 5.0
                              memory length: 462152
                                                       epsilon: 0.28293706000948116
                                                                                        steps: 330
                                                                                                      lr: 6.400000000000001e-06
episode: 2130
                score: 4.0
                              memory length: 462395
                                                       epsilon: 0.2824559200094781
                                                                                       steps: 243
                                                                                                     lr: 6.400000000000001e-06
                                     length: 462722
episode: 2131
                score: 5.0
                              memorv
                                                       epsilon: 0.281808460009474
                                                                                      steps: 327
                                                                                                     lr: 6.400000000000001e-06
                score: 9.0
                                                                                       steps: 527
episode: 2132
                              memory length: 463249
                                                       epsilon: 0.2807650000094674
                                                                                                     lr: 6.400000000000001e-06
                                                       epsilon: 0.28002448000946273
episode: 2133
                score: 6.0
                              memory length: 463623
                                                                                        steps: 374
                                                                                                       lr: 6.400000000000001e-06
                                                       epsilon: 0.279438400009459
episode: 2134
                                     length: 463919
                                                                                                     lr: 6.400000000000001e-06
                score: 4.0
                              memory
                                                                                      steps: 296
episode: 2135
                score: 6.0
                              memory length: 464292
                                                       epsilon: 0.27869986000945435
                                                                                        steps: 373
                                                                                                       lr: 6.40000000000001e-06
episode: 2136
                              memory length: 464598
                score: 5.0
                                                       epsilon: 0.2780939800094505
                                                                                       steps: 306
                                                                                                     lr: 6.400000000000001e-06
episode: 2137
                                     length: 464904
                                                                                                     lr: 6.40000000000001e-06
                score: 5.0
                                                       epsilon: 0.2774881000094467
                                                                                       steps: 306
                              memory
episode: 2138
                score: 5.0
                              memory length: 465229
                                                       epsilon: 0.2768446000094426
                                                                                       steps: 325
                                                                                                     lr: 6.400000000000001e-06
episode: 2139
                                                       epsilon: 0.27641098000943987
                                                                                                       lr: 6.40000000000001e-06
                score: 2.0
                              memory length: 465448
                                                                                        steps: 219
                                                       epsilon: 0.2758645000094364
episode: 2140
                score: 4.0
                              memory length: 465724
                                                                                       steps: 276
                                                                                                     lr: 6.400000000000001e-06
episode: 2141
                                                       epsilon: 0.2750447800094312
                score: 8.0
                              memory length: 466138
                                                                                       steps: 414
                                                                                                     lr: 6.40000000000001e-06
                                                       epsilon: 0.2742072400094259
episode: 2142
                score: 8.0
                                     length: 466561
                                                                                       steps: 423
                                                                                                     lr: 6.400000000000001e-06
                              memory
                                     length: 466839
episode: 2143
                score: 4.0
                              memory
                                                       epsilon: 0.27365680000942244
                                                                                        steps: 278
                                                                                                       lr: 6.400000000000001e-06
episode: 2144
                score: 5.0
                              memory length: 467133
                                                       epsilon: 0.27307468000941876
                                                                                        steps: 294
                                                                                                       lr: 6.400000000000001e-06
episode: 2145
                score: 6.0
                              memorv
                                     length: 467510
                                                       epsilon: 0.27232822000941403
                                                                                        steps: 377
                                                                                                          6.40000000000001e-06
episode: 2146
                score: 5.0
                                                       epsilon: 0.27171442000941015
                                                                                        steps: 310
                              memory length: 467820
                                                                                                       lr: 6.400000000000001e-06
                                                       epsilon: 0.2710412200094059
episode: 2147
                score: 6.0
                              memory length: 468160
                                                                                       steps: 340
                                                                                                     lr: 6.400000000000001e-06
                score: 5.0
                                                       epsilon: 0.27049870000940246
episode: 2148
                                     length: 468434
                                                                                        steps: 274
                                                                                                       lr: 6.40000000000001e-06
episode: 2149
                score: 4.0
                              memory length: 468715
                                                       epsilon: 0.26994232000939894
                                                                                        steps: 281
                                                                                                       lr: 6.40000000000001e-06
episode: 2150
                score: 11.0
                              memory length: 469173
                                                        epsilon: 0.2690354800093932
                                                                                        steps: 458
                                                                                                       lr: 6.400000000000001e-06
episode: 2151
                score: 3.0
                              memory length: 469383
                                                       epsilon: 0.26861968000939057
                                                                                        steps: 210
                                                                                                       lr: 6.400000000000001e-06
episode: 2152
                score: 6.0
                              memory length: 469738
                                                       epsilon: 0.2679167800093861
                                                                                       steps: 355
                                                                                                     lr: 6.400000000000001e-06
episode: 2153
                              memory length: 470092
                                                       epsilon: 0.2672158600093817
                                                                                                     lr: 6.400000000000001e-06
                score: 6.0
                                                                                       steps: 354
episode: 2154
                                                       epsilon: 0.26652880000937734
                score: 5.0
                              memory length: 470439
                                                                                        steps: 347
                                                                                                      lr: 6.400000000000001e-06
episode: 2155
                                                                                       steps: 211
                score: 3.0
                              memory length: 470650
                                                       epsilon: 0.2661110200093747
                                                                                                     lr: 6.40000000000001e-06
episode: 2156
                score: 4.0
                              memory length: 470892
                                                      epsilon: 0.26563186000937167
                                                                                        steps: 242
                                                                                                       lr: 6.40000000000001e-06
episode: 2157
                score: 6.0
                              memory length: 471267
                                                       epsilon: 0.26488936000936697
                                                                                        steps: 375
                                                                                                       lr: 6.400000000000001e-06
episode: 2158
                              memory length: 471623
                                                       epsilon: 0.2641844800093625
                                                                                       steps: 356
                                                                                                     lr: 6.400000000000001e-06
                score: 6.0
episode: 2159
                score: 4.0
                                     length: 471921
                                                       epsilon: 0.2635944400093588
                                                                                       steps: 298
                                                                                                         6.40000000000001e-06
                              memorv
episode: 2160
                                                       epsilon: 0.2631370600093559
                                                                                       steps: 231
                score: 3.0
                              memory length: 472152
                                                                                                     lr: 6.400000000000001e-06
episode: 2161
                score: 4.0
                              memory length: 472410
                                                       epsilon: 0.26262622000935265
                                                                                        steps: 258
                                                                                                       1r: 6.400000000000001e-06
episode: 2162
                score: 12.0
                               memory length: 472988
                                                        epsilon: 0.2614817800093454
                                                                                        steps: 578
                                                                                                          6.40000000000001e-06
                score: 5.0
                                                                                      steps: 274
episode: 2163
                              memory length: 473262
                                                       epsilon: 0.260939260009342
                                                                                                     lr: 6.400000000000001e-06
episode: 2164
                score: 7.0
                              memory length: 473689
                                                       ensilon: 0.26009380000933663
                                                                                        steps: 427
                                                                                                       lr: 6.400000000000001e-06
episode: 2165
                score: 6.0
                                                       epsilon: 0.25933942000933186
                                                                                                       lr: 6.400000000000001e-06
                                     length: 474070
                                                                                        steps: 381
                                                      epsilon: 0.25875334000932815
episode: 2166
                score: 4.0
                              memory length: 474366
                                                                                        steps: 296
                                                                                                       lr: 6.400000000000001e-06
episode: 2167
                              memory length: 474690
                                                                                                     lr: 6.400000000000001e-06
                score: 5.0
                                                       epsilon: 0.2581118200093241
                                                                                       steps: 324
episode: 2168
                score: 7.0
                              memory length: 475086
                                                       epsilon: 0.25732774000931913
                                                                                        steps: 396
                                                                                                       lr: 6.400000000000001e-06
                score: 7.0
episode: 2169
                              memory length: 475440
                                                       epsilon: 0.2566268200093147
                                                                                       steps: 354
                                                                                                     lr: 6.400000000000001e-06
episode: 2170
                score: 7.0
                                     length: 475814
                                                       epsilon: 0.25588630000931
                                                                                     steps: 374
                                                                                                   lr: 6.400000000000001e-06
                              memory
episode: 2171
                score: 5.0
                              memory length: 476085
                                                       ensilon: 0.2553497200093066
                                                                                       steps: 271
                                                                                                     lr: 6.400000000000001e-06
episode: 2172
                score: 4.0
                              memory length: 476346
                                                       epsilon: 0.25483294000930334
                                                                                        steps: 261
                                                                                                       lr: 6.400000000000001e-06
episode: 2173
                                     length: 476718
                                                                                                     lr: 6.400000000000001e-06
                score: 6.0
                              memory
                                                       epsilon: 0.2540963800092987
                                                                                       steps: 372
episode: 2174
                score: 5.0
                              memory length: 477024
                                                       epsilon: 0.25349050000929485
                                                                                        steps: 306
                                                                                                       lr: 6.400000000000001e-06
episode: 2175
                score: 5.0
                              memory length: 477351
                                                       epsilon: 0.25284304000929075
                                                                                        steps: 327
                                                                                                       lr: 6.400000000000001e-06
episode: 2176
                score: 4.0
                                     length: 477646
                                                       epsilon: 0.25225894000928706
                                                                                        steps: 295
                                                                                                          6.40000000000001e-06
                              memorv
episode: 2177
                                                                                      steps: 246
                score: 3.0
                              memory length: 477892
                                                       epsilon: 0.251771860009284
                                                                                                     lr: 6.400000000000001e-06
                                                       epsilon: 0.2511244000092799
episode: 2178
                score: 5.0
                              memory length: 478219
                                                                                       steps: 327
                                                                                                     lr: 6.400000000000001e-06
episode: 2179
                                                                                                     lr: 6.400000000000001e-06
                score: 3.0
                                     length: 478450
                                                       epsilon: 0.250667020009277
                                                                                      steps: 231
episode: 2180
                score: 3.0
                              memory length: 478679
                                                       epsilon: 0.2502136000092741
                                                                                       steps: 229
                                                                                                     lr: 6.400000000000001e-06
episode: 2181
                score: 6.0
                              memory length: 479037
                                                       epsilon: 0.24950476000926963
                                                                                        steps: 358
                                                                                                       lr: 6.400000000000001e-06
                score: 13.0
episode: 2182
                               memory length: 479563
                                                        epsilon: 0.24846328000926304
                                                                                         steps: 526
                                                                                                       lr: 6.400000000000001e-06
episode: 2183
                score: 13.0
                               memory length: 479981
                                                        epsilon: 0.2476356400092578
                                                                                        steps: 418
                                                                                                       lr: 6.400000000000001e-06
episode: 2184
                              memory length: 480318
                                                       epsilon: 0.24696838000925359
                score: 6.0
                                                                                        steps: 337
                                                                                                       lr: 6.400000000000001e-06
episode: 2185
                                                       epsilon: 0.2461645000092485
                score: 7.0
                              memory length: 480724
                                                                                       steps: 406
                                                                                                     lr: 6.400000000000001e-06
episode: 2186
                score: 7.0
                              memory length: 481094
                                                       epsilon: 0.24543190000924386
                                                                                        steps: 370
                                                                                                       lr: 6.400000000000001e-06
episode: 2187
                              memory length: 481428
                                                       epsilon: 0.24477058000923968
                score: 6.0
                                                                                        steps: 334
                                                                                                       lr: 6.40000000000001e-06
episode: 2188
                score: 7.0
                              memory length: 481802
                                                       epsilon: 0.244030060009235
                                                                                      steps: 374
                                                                                                     lr: 6.400000000000001e-06
                                                                                                       lr: 6.400000000000001e-06
episode: 2189
                score: 8.0
                              memory length: 482253
                                                       epsilon: 0.24313708000922934
                                                                                        steps: 451
episode: 2190
                score: 6.0
                              memory
                                    length: 482647
                                                       epsilon: 0.2423569600092244
                                                                                       steps: 394
                                                                                                     lr: 6.400000000000001e-06
episode: 2191
                score: 4.0
                              memory length: 482926
                                                       epsilon: 0.24180454000922091
                                                                                        steps: 279
                                                                                                       lr: 6.400000000000001e-06
                                                                                                       lr: 6.40000000000001e-06
episode: 2192
                score: 4.0
                              memory length: 483186
                                                       epsilon: 0.24128974000921766
                                                                                        steps: 260
episode: 2193
                score: 10.0
                               memory length: 483690
                                                        epsilon: 0.24029182000921134
                                                                                         steps: 504
                                                                                                       lr: 6.400000000000001e-06
episode: 2194
                              memory length: 484016
                                                       epsilon: 0.23964634000920726
                                                                                        steps: 326
                score: 5.0
                                                                                                       lr: 6.400000000000001e-06
episode: 2195
                                                       epsilon: 0.23904442000920345
                score: 5.0
                              memory length: 484320
                                                                                        steps: 304
                                                                                                       lr: 6.400000000000001e-06
                score: 5.0
                                                       epsilon: 0.2384345800091996
                                                                                       steps: 308
                                                                                                     lr: 6.400000000000001e-06
episode: 2196
                              memory
                                     length: 484628
episode: 2197
                score: 5.0
                                                       epsilon: 0.23786236000919597
                                                                                                       lr: 6.40000000000001e-06
                              memory length: 484917
                                                                                        steps: 289
```

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epsilon: 0.23724460000919206
                                                                                                       1r: 6.400000000000001e-06
episode: 2198
                score: 5.0
                              memory length: 485229
                                                                                        steps: 312
episode: 2199
                score: 7.0
                              memory length: 485629
                                                       epsilon: 0.23645260000918705
                                                                                        steps: 400
                                                                                                      lr: 6.400000000000001e-06
episode: 2200
                score: 4.0
                              memorv
                                     length: 485908
                                                       epsilon: 0.23590018000918356
                                                                                        steps:
                                                                                               279
                                                                                                           6.40000000000001e-06
episode: 2201
                score: 6.0
                                                       epsilon: 0.23522302000917927
                                                                                        steps: 342
                              memory length: 486250
                                                                                                       lr: 6.400000000000001e-06
                              memory length: 486657
                                                       epsilon: 0.23441716000917417
episode: 2202
                score: 7.0
                                                                                        steps: 407
                                                                                                       1r: 6.400000000000001e-06
                                                                                        steps: 373
episode: 2203
                score: 10.0
                               memory length: 487030
                                                        epsilon: 0.2336786200091695
                                                                                                           6.40000000000001e-06
episode: 2204
                score: 7.0
                              memory length: 487420
                                                       epsilon: 0.23290642000916462
                                                                                        steps: 390
                                                                                                       lr: 6.40000000000001e-06
episode: 2205
                score: 6.0
                              memory length: 487812
                                                       epsilon: 0.2321302600091597
                                                                                       steps: 392
                                                                                                      lr: 6.400000000000001e-06
episode: 2206
                score: 7.0
                              memory length: 488202
                                                       epsilon: 0.23135806000915482
                                                                                        steps: 390
                                                                                                       lr: 6.40000000000001e-06
episode: 2207
                score: 13.0
                               memory length: 488779
                                                        epsilon: 0.2302156000091476
                                                                                        steps: 577
                                                                                                       lr: 6.40000000000001e-06
episode: 2208
                              memory length: 489122
                                                       epsilon: 0.2295364600091433
                                                                                                      lr: 6.400000000000001e-06
                score: 6.0
                                                                                       steps: 343
episode: 2209
                                                       epsilon: 0.22886920000913907
                score: 6.0
                              memory length: 489459
                                                                                        steps: 337
                                                                                                      lr: 6.400000000000001e-06
episode: 2210
                score: 6.0
                              memory length: 489824
                                                       epsilon: 0.2281465000091345
                                                                                                      lr: 6.400000000000001e-06
                                                                                       steps: 365
episode: 2211
                score: 5.0
                              memory length: 490131
                                                       epsilon: 0.22753864000913065
                                                                                        steps: 307
                                                                                                      lr: 6.400000000000001e-06
episode: 2212
                score: 8.0
                              memory length: 490558
                                                       epsilon: 0.2266931800091253
                                                                                       steps: 427
                                                                                                      lr: 6.400000000000001e-06
episode: 2213
                score: 5.0
                              memory length: 490866
                                                       epsilon: 0.22608334000912145
                                                                                        steps: 308
                                                                                                       lr: 6.400000000000001e-06
episode: 2214
                score: 10.0
                               memory length: 491351
                                                        epsilon: 0.22512304000911537
                                                                                         steps: 485
                                                                                                        lr: 6.400000000000001e-0
episode: 2215
                score: 5.0
                              memory length: 491678
                                                       epsilon: 0.22447558000911128
                                                                                        steps: 327
                                                                                                       lr: 6.400000000000001e-06
episode: 2216
                score: 6.0
                              memory length: 492037
                                                       epsilon: 0.22376476000910678
                                                                                        steps: 359
                                                                                                      lr: 6.40000000000001e-06
episode: 2217
                score: 4.0
                              memorv
                                     length: 492298
                                                       epsilon: 0.2232479800091035
                                                                                       steps: 261
                                                                                                      lr: 6.400000000000001e-06
                score: 7.0
episode: 2218
                              memory length: 492721
                                                       epsilon: 0.2224104400090982
                                                                                       steps: 423
                                                                                                      lr: 6.400000000000001e-06
episode: 2219
                score: 6.0
                              memory length: 493099
                                                       ensilon: 0.22166200000909347
                                                                                        steps: 378
                                                                                                      lr: 6.400000000000001e-06
                                     length: 493326
                                                       epsilon: 0.22121254000909063
episode: 2220
                score: 3.0
                                                                                                           6.40000000000001e-06
                                                                                        steps: 227
episode: 2221
                score: 7.0
                              memory length: 493772
                                                       epsilon: 0.22032946000908504
                                                                                        steps: 446
                                                                                                       lr: 6.40000000000001e-06
episode: 2222
                              memory length: 494063
                                                       epsilon: 0.2197532800090814
                                                                                       steps: 291
                score: 5.0
                                                                                                      lr: 6.400000000000001e-06
episode: 2223
                                     length: 494294
                score: 3.0
                                                       epsilon: 0.2192959000090785
                                                                                       steps: 231
                                                                                                      lr: 6.400000000000001e-06
                              memory
episode: 2224
                              memory length: 494650
                                                                                                       lr: 6.400000000000001e-06
                score: 6.0
                                                       epsilon: 0.21859102000907404
                                                                                        steps: 356
episode: 2225
                score: 7.0
                              memory length: 495044
                                                       epsilon: 0.2178109000090691
                                                                                       steps: 394
                                                                                                      lr: 6.400000000000001e-06
episode: 2226
                score: 4.0
                              memory length: 495324
                                                       ensilon: 0.2172565000090656
                                                                                       steps: 280
                                                                                                      lr: 6.400000000000001e-06
                score: 3.0
episode: 2227
                                                       epsilon: 0.21683278000906292
                                                                                        steps: 214
                                                                                                       lr: 6.40000000000001e-06
                              memory length: 495538
episode: 2228
                score: 8.0
                                     length: 495994
                                                       epsilon: 0.2159299000090572
                                                                                                      lr: 6.40000000000001e-06
                              memory
                                                                                       steps: 456
episode: 2229
                score: 6.0
                                     length: 496356
                                                       epsilon: 0.21521314000905267
                                                                                                      lr: 6.400000000000001e-06
                              memory
                                                                                        steps: 362
episode: 2230
                score: 5.0
                              memory length: 496665
                                                       epsilon: 0.2146013200090488
                                                                                       steps: 309
                                                                                                      lr: 6.400000000000001e-06
episode: 2231
                score: 3.0
                              memorv
                                     length: 496899
                                                       epsilon: 0.21413800000904587
                                                                                        steps: 234
                                                                                                       lr: 6.400000000000001e-06
episode: 2232
                score: 7.0
                              memory length: 497251
                                                       epsilon: 0.21344104000904146
                                                                                        steps: 352
                                                                                                       lr: 6.400000000000001e-06
episode: 2233
                score: 4.0
                              memory length: 497511
                                                       epsilon: 0.2129262400090382
                                                                                       steps: 260
                                                                                                      lr: 6.400000000000001e-06
episode: 2234
                score: 5.0
                                     length: 497835
                                                       epsilon: 0.21228472000903414
                                                                                                       lr: 6.40000000000001e-06
                              memory
                                                                                        steps: 324
episode: 2235
                score: 5.0
                              memory length: 498109
                                                       epsilon: 0.2117422000090307
                                                                                       steps: 274
                                                                                                      lr: 6.400000000000001e-06
                              memory length: 498512
episode: 2236
                score: 7.0
                                                       epsilon: 0.21094426000902566
                                                                                        steps: 403
                                                                                                      lr: 6.400000000000001e-06
                                     length: 498851
episode: 2237
                score: 6.0
                                                       epsilon: 0.21027304000902142
                                                                                        steps: 339
                                                                                                          6.400000000000001e-06
                              memory
episode: 2238
                score: 6.0
                              memory length: 499229
                                                       epsilon: 0.20952460000901668
                                                                                        steps: 378
                                                                                                       lr: 6.40000000000001e-06
episode: 2239
                              memory length: 499540
                score: 5.0
                                                       epsilon: 0.20890882000901279
                                                                                        steps: 311
                                                                                                          6.400000000000001e-06
                                                                                                       1r:
                                                       epsilon: 0.20831284000900901
episode: 2240
                score: 4.0
                              memory length: 499841
                                                                                        steps: 301
                                                                                                       lr: 6.400000000000001e-06
episode: 2241
                score: 7.0
                              memory length: 500221
                                                       epsilon: 0.20756044000900425
                                                                                        steps: 380
                                                                                                       lr: 2.560000000000001e-06
episode: 2242
                score: 8.0
                              memory length: 500661
                                                       epsilon: 0.20668924000899874
                                                                                        steps: 440
                                                                                                       lr: 2.560000000000001e-06
episode: 2243
                score: 7.0
                              memory length: 501069
                                                       epsilon: 0.20588140000899363
                                                                                        steps: 408
                                                                                                      lr: 2.560000000000001e-06
episode: 2244
                score: 9.0
                              memory length: 501415
                                                       epsilon: 0.2051963200089893
                                                                                       steps: 346
                                                                                                      lr: 2.560000000000001e-06
episode: 2245
                score: 3.0
                              memory
                                     length:
                                             501646
                                                       epsilon: 0.2047389400089864
                                                                                       steps: 231
                                                                                                      lr: 2.560000000000001e-06
episode: 2246
                              memory length: 501969
                                                       epsilon: 0.20409940000898236
                score: 6.0
                                                                                        steps: 323
                                                                                                       lr: 2.560000000000001e-06
episode: 2247
                score: 6.0
                              memory length: 502307
                                                       epsilon: 0.20343016000897812
                                                                                        steps: 338
                                                                                                       1r: 2.560000000000001e-06
episode: 2248
                score: 4.0
                              memory
                                     length: 502550
                                                       epsilon: 0.20294902000897508
                                                                                        steps: 243
                                                                                                           2.56000000000001e-06
episode: 2249
                score: 4.0
                              memory length: 502810
                                                       epsilon: 0.20243422000897182
                                                                                        steps: 260
                                                                                                       lr: 2.560000000000001e-06
episode: 2250
                score: 9.0
                              memory length: 503279
                                                       epsilon: 0.20150560000896595
                                                                                        steps: 469
                                                                                                       lr: 2.560000000000001e-06
episode: 2251
                score: 7.0
                                     length: 503691
                                                       epsilon: 0.20068984000896078
                                                                                                       lr: 2.560000000000001e-06
                                                                                        steps: 412
episode: 2252
                score: 5.0
                              memory length: 504015
                                                       epsilon: 0.20004832000895673
                                                                                        steps: 324
                                                                                                       lr: 2.560000000000001e-06
episode: 2253
                score: 11.0
                              memory length: 504540
                                                        epsilon: 0.19900882000895015
                                                                                         steps: 525
                                                                                                       lr: 2.5600000000000001e-06
episode: 2254
                score: 4.0
                              memory length: 504781
                                                       epsilon: 0.19853164000894713
                                                                                        steps: 241
                                                                                                       1r: 2.560000000000001e-06
episode: 2255
                score: 5.0
                              memory length: 505089
                                                       epsilon: 0.19792180000894327
                                                                                        steps: 308
                                                                                                       lr: 2.560000000000001e-06
episode: 2256
                score: 5.0
                              memory length: 505363
                                                       epsilon: 0.19737928000893984
                                                                                        steps: 274
                                                                                                       lr: 2.560000000000001e-06
episode: 2257
                score: 11.0
                               memory length: 505743
                                                        epsilon: 0.19662688000893508
                                                                                         steps: 380
                                                                                                       lr: 2.560000000000001e-06
episode: 2258
                              memory length: 506131
                                                       epsilon: 0.19585864000893022
                                                                                        steps: 388
                                                                                                       lr: 2.560000000000001e-06
                score: 7.0
episode: 2259
                                     length: 506415
                                                       epsilon: 0.19529632000892666
                                                                                                       1r: 2.560000000000001e-06
                score: 4.0
                                                                                        steps: 284
                              memory
episode: 2260
                score: 6.0
                              memory length: 506793
                                                       epsilon: 0.19454788000892193
                                                                                        steps: 378
                                                                                                       lr: 2.560000000000001e-06
episode: 2261
                score: 6.0
                              memory length: 507114
                                                       epsilon: 0.1939123000089179
                                                                                       steps: 321
                                                                                                      lr: 2.560000000000001e-06
episode: 2262
                score: 8.0
                              memorv
                                     length:
                                             507580
                                                       epsilon: 0.19298962000891207
                                                                                        steps: 466
                                                                                                       lr: 2.560000000000001e-06
                score: 7.0
                              memory length: 507983
episode: 2263
                                                       epsilon: 0.19219168000890702
                                                                                        steps: 403
                                                                                                       lr: 2.560000000000001e-06
episode: 2264
                score: 7.0
                              memory length: 508379
                                                       epsilon: 0.19140760000890206
                                                                                        steps: 396
                                                                                                       1r: 2.560000000000001e-06
                score: 8.0
                                     length: 508825
                                                                                                           2.560000000000001e-06
episode: 2265
                              memory
                                                       epsilon: 0.19052452000889647
                                                                                        steps:
                                                                                               446
episode: 2266
                score: 4.0
                              memory length: 509088
                                                       epsilon: 0.19000378000889317
                                                                                        steps: 263
                                                                                                       lr: 2.560000000000001e-06
episode: 2267
                              memory length: 509491
                score: 7.0
                                                       epsilon: 0.18920584000888813
                                                                                        steps: 403
                                                                                                       lr: 2.560000000000001e-06
                                     length: 509871
episode: 2268
                score: 7.0
                                                       epsilon: 0.18845344000888337
                                                                                        steps: 380
                                                                                                       lr: 2.560000000000001e-06
                score: 5.0
episode: 2269
                              memory length: 510163
                                                       epsilon: 0.1878752800088797
                                                                                       steps: 292
                                                                                                      1r: 2.560000000000001e-06
episode: 2270
                              memory length: 510731
                                                                                                       lr: 2.560000000000001e-06
                score: 15.0
                                                        epsilon: 0.1867506400088726
                                                                                        steps: 568
                                                       epsilon: 0.18610714000886852
episode: 2271
                score: 6.0
                              memory length: 511056
                                                                                        steps: 325
                                                                                                       lr: 2.5600000000000001e-06
episode: 2272
                score: 5.0
                              memory length: 511347
                                                       epsilon: 0.18553096000886488
                                                                                        steps: 291
                                                                                                       lr: 2.560000000000001e-06
episode: 2273
                score: 7.0
                              memory length: 511736
                                                       epsilon: 0.18476074000886
                                                                                     steps: 389
                                                                                                    1r: 2.5600000000000001e-06
                                                                                        steps: 260
episode: 2274
                score: 4.0
                              memory length: 511996
                                                       epsilon: 0.18424594000885675
                                                                                                       lr: 2.560000000000001e-06
episode: 2275
                              memory length: 512335
                                                       epsilon: 0.1835747200088525
                                                                                       steps: 339
                                                                                                      lr: 2.560000000000001e-06
                score: 6.0
episode: 2276
                score: 4.0
                              memory length: 512613
                                                       epsilon: 0.18302428000884902
                                                                                        steps: 278
                                                                                                       lr: 2.560000000000001e-06
episode: 2277
                                                        epsilon: 0.1817749000088411
                score: 12.0
                              memory length: 513244
                                                                                        steps: 631
                                                                                                       lr: 2.560000000000001e-06
episode: 2278
                score: 6.0
                              memory length: 513619
                                                       epsilon: 0.1810324000088364
                                                                                       steps: 375
                                                                                                      1r: 2.560000000000001e-06
episode: 2279
                score: 4.0
                                     length: 513920
                                                       epsilon: 0.18043642000883264
                                                                                        steps: 301
                                                                                                       lr: 2.560000000000001e-06
                              memory
                                                                                       steps: 275
episode: 2280
                score: 5.0
                              memory length: 514195
                                                       epsilon: 0.1798919200088292
                                                                                                      lr: 2.560000000000001e-06
episode: 2281
                score: 6.0
                              memory length: 514517
                                                       epsilon: 0.17925436000882516
                                                                                        steps: 322
                                                                                                       lr: 2.560000000000001e-06
episode: 2282
                score: 8.0
                              memory length: 514929
                                                       epsilon: 0.17843860000882
                                                                                     steps: 412
                                                                                                    lr: 2.560000000000001e-06
```

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episode: 2283
                score: 5.0
                              memory length: 515278
                                                       epsilon: 0.17774758000881563
                                                                                                       lr: 2.560000000000001e-06
                                                                                        steps: 349
episode: 2284
                              memory length: 515655
                                                       epsilon: 0.1770011200088109
                                                                                       steps: 377
                score: 6.0
                                                                                                      lr: 2.560000000000001e-06
episode: 2285
                score: 4.0
                              memory length: 515898
                                                       epsilon: 0.17651998000880786
                                                                                        steps: 243
                                                                                                       lr: 2.5600000000000001e-06
episode: 2286
                score: 6.0
                              memorv
                                     length: 516236
                                                       epsilon: 0.17585074000880363
                                                                                        steps: 338
                                                                                                       lr: 2.560000000000001e-06
episode: 2287
                score: 4.0
                              memory length: 516537
                                                       epsilon: 0.17525476000879986
                                                                                        steps: 301
                                                                                                       lr: 2.560000000000001e-06
                                                                                        steps: 390
episode: 2288
                score: 7.0
                              memory length: 516927
                                                       epsilon: 0.17448256000879497
                                                                                                       1r: 2.560000000000001e-06
episode: 2289
                                                        epsilon: 0.17318566000878677
                score: 13.0
                               memory length: 517582
                                                                                         steps: 655
                                                                                                        lr: 2.560000000000001e-06
episode: 2290
                score: 11.0
                               memory length: 518009
                                                        epsilon: 0.17234020000878142
                                                                                         steps: 427
                                                                                                        lr: 2.5600000000000001e-06
episode: 2291
                score: 7.0
                              memory length: 518413
                                                       epsilon: 0.17154028000877636
                                                                                        steps: 404
                                                                                                       lr: 2.560000000000001e-06
                                     length: 518687
episode: 2292
                score: 5.0
                                                       epsilon: 0.17099776000877293
                                                                                        steps: 274
                                                                                                       lr: 2.560000000000001e-06
                              memory
episode: 2293
                score: 7.0
                              memory length: 519076
                                                       epsilon: 0.17022754000876805
                                                                                        steps: 389
                                                                                                       lr: 2.560000000000001e-06
                              memory length: 519338
episode: 2294
                                                       epsilon: 0.16970878000876477
                                                                                        steps: 262
                                                                                                       lr: 2.560000000000001e-06
                score: 4.0
episode: 2295
                score: 8.0
                              memory length: 519812
                                                       ensilon: 0.16877026000875883
                                                                                        steps: 474
                                                                                                       lr: 2.5600000000000001e-06
                score: 5.0
                                                                                                      lr: 2.560000000000001e-06
episode: 2296
                              memory length: 520102
                                                       epsilon: 0.1681960600087552
                                                                                       steps: 290
episode: 2297
                               memory length: 520563
                                                        epsilon: 0.16728328000874942
                                                                                         steps: 461
                                                                                                        lr: 2.5600000000000001e-06
                score: 11.0
episode: 2298
                score: 6.0
                              memory length: 520921
                                                       epsilon: 0.16657444000874494
                                                                                        steps: 358
                                                                                                       lr: 2.560000000000001e-06
                                                       epsilon: 0.16573888000873965
episode: 2299
                score: 7.0
                              memory length: 521343
                                                                                        steps: 422
                                                                                                       lr: 2.560000000000001e-06
episode: 2300
                score: 5.0
                                     length: 521638
                                                       epsilon: 0.16515478000873596
                                                                                        steps: 295
                                                                                                           2.560000000000001e-06
                              memorv
episode: 2301
                score: 9.0
                              memory length: 522072
                                                       epsilon: 0.16429546000873052
                                                                                        steps: 434
                                                                                                       lr: 2.560000000000001e-06
episode: 2302
                                                       epsilon: 0.16325596000872394
                score: 9.0
                              memory length: 522597
                                                                                        steps: 525
                                                                                                       lr: 2.5600000000000001e-06
episode: 2303
                                                       epsilon: 0.1627094800087205
                score: 4.0
                              memory
                                    length: 522873
                                                                                       steps: 276
                                                                                                      lr: 2.560000000000001e-06
                score: 10.0
episode: 2304
                               memory length: 523386
                                                        epsilon: 0.16169374000871406
                                                                                         steps: 513
                                                                                                        lr: 2.5600000000000001e-06
episode: 2305
                score: 7.0
                              memory length: 523771
                                                       epsilon: 0.16093144000870924
                                                                                        steps: 385
                                                                                                       lr: 2.560000000000001e-06
episode: 2306
                score: 4.0
                                     length: 524032
                                                       epsilon: 0.16041466000870597
                                                                                        steps: 261
                                                                                                           2.560000000000001e-06
                              memory
episode: 2307
                score: 6.0
                              memory length: 524370
                                                       epsilon: 0.15974542000870173
                                                                                        steps: 338
                                                                                                       lr: 2.560000000000001e-06
episode: 2308
                              memory length: 524842
                score: 8.0
                                                       epsilon: 0.15881086000869582
                                                                                        steps: 472
                                                                                                       lr: 2.560000000000001e-06
episode: 2309
                score: 6.0
                                     length: 525181
                                                       epsilon: 0.15813964000869157
                                                                                        steps: 339
                                                                                                       lr: 2.560000000000001e-06
                              memory
episode: 2310
                score: 5.0
                              memory length: 525498
                                                       epsilon: 0.1575119800086876
                                                                                       steps: 317
                                                                                                      lr: 2.560000000000001e-06
episode: 2311
                score: 4.0
                              memory length: 525741
                                                       epsilon: 0.15703084000868456
                                                                                        steps: 243
                                                                                                       lr: 2.560000000000001e-06
episode: 2312
                score: 4.0
                              memory length: 526021
                                                       epsilon: 0.15647644000868105
                                                                                        steps: 280
                                                                                                       lr: 2.560000000000001e-06
episode: 2313
                score: 6.0
                              memory length: 526373
                                                       epsilon: 0.15577948000867664
                                                                                        steps: 352
                                                                                                       lr: 2.560000000000001e-06
episode: 2314
                score: 6.0
                                             526728
                                                       epsilon: 0.1550765800086722
                                                                                       steps: 355
                                                                                                      1r: 2.560000000000001e-06
                                     length:
                              memory
episode: 2315
                score: 4.0
                                     length: 526988
                                                       epsilon: 0.15456178000866894
                                                                                        steps: 260
                                                                                                       lr: 2.560000000000001e-06
                              memory
episode: 2316
                              memory length: 527361
                score: 7.0
                                                       epsilon: 0.15382324000866426
                                                                                        steps: 373
                                                                                                       lr: 2.560000000000001e-06
episode: 2317
                score: 6.0
                              memory
                                     length: 527700
                                                       epsilon: 0.15315202000866002
                                                                                        steps: 339
                                                                                                           2.56000000000001e-06
episode: 2318
                score: 7.0
                                                                                        steps: 370
                              memory length: 528070
                                                       epsilon: 0.15241942000865538
                                                                                                       lr: 2.560000000000001e-06
                              memory length: 528438
episode: 2319
                score: 7.0
                                                       epsilon: 0.15169078000865077
                                                                                        steps: 368
                                                                                                       1r: 2.560000000000001e-06
episode: 2320
                                     length: 528862
                                                       epsilon: 0.15085126000864546
                score: 7.0
                                                                                                           2.560000000000001e-06
                                                                                        steps: 424
episode: 2321
                score: 5.0
                              memory length: 529189
                                                       epsilon: 0.15020380000864136
                                                                                        steps: 327
                                                                                                       lr: 2.560000000000001e-06
episode: 2322
                score: 5.0
                              memory length: 529481
                                                       epsilon: 0.1496256400086377
                                                                                       steps: 292
                                                                                                      lr: 2.560000000000001e-06
episode: 2323
                score: 6.0
                                     length: 529839
                                                       epsilon: 0.14891680000863322
                                                                                        steps: 358
                                                                                                       lr: 2.560000000000001e-06
                              memory
episode: 2324
                score: 4.0
                              memory length: 530099
                                                       epsilon: 0.14840200000862996
                                                                                        steps: 260
                                                                                                       lr: 2.560000000000001e-06
episode: 2325
                              memory length: 530357
                                                       epsilon: 0.14789116000862673
                score: 4.0
                                                                                        steps: 258
                                                                                                       lr: 2.560000000000001e-06
episode: 2326
                              memory
                score: 3.0
                                     length: 530588
                                                       ensilon: 0.14743378000862384
                                                                                        steps: 231
                                                                                                       lr: 2.560000000000001e-06
episode: 2327
                score: 5.0
                              memory length: 530935
                                                       epsilon: 0.1467467200086195
                                                                                       steps: 347
                                                                                                      lr: 2.560000000000001e-06
episode: 2328
                score: 9.0
                                     length: 531388
                                                       epsilon: 0.14584978000861382
                                                                                        steps: 453
                                                                                                       1r: 2.560000000000001e-06
                              memory
episode: 2329
                score: 7.0
                                                       epsilon: 0.14511124000860914
                              memory length: 531761
                                                                                        steps: 373
                                                                                                       lr: 2.560000000000001e-06
episode: 2330
                score: 3.0
                              memory length: 531973
                                                       epsilon: 0.1446914800086065
                                                                                       steps: 212
                                                                                                      lr: 2.560000000000001e-06
episode: 2331
                score: 4.0
                              memorv
                                     length:
                                             532233
                                                       epsilon: 0.14417668000860323
                                                                                        steps: 260
                                                                                                       lr: 2.560000000000001e-06
episode: 2332
                score: 4.0
                              memory length: 532493
                                                       epsilon: 0.14366188000859997
                                                                                        steps: 260
                                                                                                       lr: 2.560000000000001e-06
                              memory length: 532934
                                                       epsilon: 0.14278870000859445
episode: 2333
                score: 8.0
                                                                                        steps: 441
                                                                                                       1r: 2.560000000000001e-06
episode: 2334
                score: 6.0
                              memory
                                     length: 533275
                                                       epsilon: 0.14211352000859018
                                                                                        steps: 341
                                                                                                           2.56000000000001e-06
episode: 2335
                score: 6.0
                              memory length: 533596
                                                       epsilon: 0.14147794000858616
                                                                                        steps: 321
                                                                                                       lr: 2.560000000000001e-06
episode: 2336
                              memory length: 533891
                score: 5.0
                                                       epsilon: 0.14089384000858246
                                                                                        steps: 295
                                                                                                       lr: 2.560000000000001e-06
                                     length: 534199
                                                                                                      lr: 2.560000000000001e-06
episode: 2337
                score: 5.0
                              memory
                                                       epsilon: 0.1402840000085786
                                                                                       steps: 308
episode: 2338
                score: 5.0
                              memory length: 534506
                                                       epsilon: 0.13967614000857476
                                                                                        steps: 307
                                                                                                       lr: 2.560000000000001e-06
                              memory length: 534930
episode: 2339
                score: 8.0
                                                       epsilon: 0.13883662000856944
                                                                                        steps: 424
                                                                                                       lr: 2.560000000000001e-06
episode: 2340
                score: 7.0
                              memory
                                     length: 535334
                                                       epsilon: 0.13803670000856438
                                                                                        steps: 404
                                                                                                       lr:
                                                                                                           2.560000000000001e-06
episode: 2341
                score: 7.0
                              memory length: 535695
                                                       epsilon: 0.13732192000855986
                                                                                        steps: 361
                                                                                                       lr: 2.560000000000001e-06
episode: 2342
                score: 9.0
                                     length: 536191
                                                       epsilon: 0.13633984000855365
                                                                                        steps: 496
                                                                                                       1r: 2.560000000000001e-06
                              memory
episode: 2343
                score: 7.0
                              memory length: 536560
                                                       epsilon: 0.13560922000854903
                                                                                        steps: 369
                                                                                                       lr: 2.560000000000001e-06
episode: 2344
                              memory length: 536914
                                                       epsilon: 0.1349083000085446
                                                                                       steps: 354
                                                                                                      lr: 2.560000000000001e-06
                score: 6.0
episode: 2345
                score: 4.0
                                     length: 537174
                                                       epsilon: 0.13439350000854133
                                                                                        steps: 260
                                                                                                       lr: 2.560000000000001e-06
                              memory
episode: 2346
                              memory length: 537548
                                                                                        steps: 374
                score: 6.0
                                                       epsilon: 0.13365298000853665
                                                                                                       lr: 2.560000000000001e-06
episode: 2347
                score: 3.0
                              memory length: 537779
                                                       epsilon: 0.13319560000853375
                                                                                        steps: 231
                                                                                                       1r: 2.560000000000001e-06
episode: 2348
                score: 9.0
                                     length: 538271
                                                       epsilon: 0.1322214400085276
                                                                                       steps: 492
                                                                                                      lr: 2.560000000000001e-06
                              memory
episode: 2349
                score: 7.0
                              memory length: 538672
                                                       epsilon: 0.13142746000852257
                                                                                        steps: 401
                                                                                                       lr: 2.560000000000001e-06
episode: 2350
                score: 4.0
                              memory length: 538966
                                                       epsilon: 0.13084534000851888
                                                                                        steps: 294
                                                                                                       1r: 2.560000000000001e-06
                                     length: 539322
                                                       epsilon: 0.13014046000851442
episode: 2351
                                                                                        steps: 356
                                                                                                           2.560000000000001e-06
                score: 6.0
episode: 2352
                score: 10.0
                               memory length: 539844
                                                        epsilon: 0.12910690000850789
                                                                                         steps: 522
                                                                                                        lr: 2.5600000000000001e-0
episode: 2353
                score: 4.0
                              memory length: 540121
                                                       epsilon: 0.12855844000850442
                                                                                        steps: 277
                                                                                                       lr: 2.560000000000001e-06
episode: 2354
                score: 7.0
                                     length: 540546
                                                       epsilon: 0.1277169400084991
                                                                                       steps: 425
                                                                                                      1r: 2.560000000000001e-06
                              memory
episode: 2355
                score: 9.0
                              memory length: 540892
                                                       epsilon: 0.12703186000849476
                                                                                        steps: 346
                                                                                                       lr: 2.560000000000001e-06
episode: 2356
                score: 6.0
                              memory length: 541269
                                                       epsilon: 0.12628540000849003
                                                                                        steps: 377
                                                                                                       lr: 2.560000000000001e-06
episode: 2357
                score: 5.0
                              memory length: 541578
                                                       epsilon: 0.12567358000848616
                                                                                        steps: 309
                                                                                                       lr: 2.560000000000001e-06
episode: 2358
                                                       epsilon: 0.12509938000848253
                                                                                        steps: 290
                score: 5.0
                              memory length: 541868
                                                                                                       lr: 2.560000000000001e-06
episode: 2359
                score: 9.0
                                     length: 542234
                                                       epsilon: 0.12437470000848233
                                                                                                           2.560000000000001e-06
                              memory
                                                                                        steps: 366
                                                                                                       lr:
episode: 2360
                score: 7.0
                              memory length: 542643
                                                       epsilon: 0.12356488000848288
                                                                                        steps: 409
                                                                                                       lr: 2.560000000000001e-06
episode: 2361
                              memory length: 543047
                                                       epsilon: 0.12276496000848343
                                                                                        steps: 404
                                                                                                       lr: 2.560000000000001e-06
                score: 7.0
episode: 2362
                score: 3.0
                              memory length: 543278
                                                       epsilon: 0.12230758000848374
                                                                                        steps: 231
                                                                                                           2.560000000000001e-06
episode: 2363
                score: 10.0
                              memory length: 543650
                                                        epsilon: 0.12157102000848424
                                                                                         steps: 372
                                                                                                        lr: 2.560000000000001e-06
episode: 2364
                score: 4.0
                              memory length: 543926
                                                       epsilon: 0.12102454000848462
                                                                                        steps: 276
                                                                                                       1r: 2.560000000000001e-06
                                                                                                          2.560000000000001e-06
episode: 2365
                score: 8.0
                              memory
                                     length: 544339
                                                       epsilon: 0.12020680000848517
                                                                                        steps: 413
episode: 2366
                score: 9.0
                              memory length: 544811
                                                       epsilon: 0.11927224000848581
                                                                                        steps: 472
                                                                                                       lr: 2.560000000000001e-06
                                                       epsilon: 0.11849014000848634
                              memory length: 545206
episode: 2367
                score: 7.0
                                                                                        steps: 395
                                                                                                       lr: 2.560000000000001e-06
```

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episode: 2368
                score: 7.0
                              memory length: 545653
                                                       epsilon: 0.11760508000848695
                                                                                        steps: 447
                                                                                                       lr: 2.560000000000001e-06
episode: 2369
                score: 8.0
                                     length: 546076
                                                       epsilon: 0.11676754000848752
                                                                                        steps: 423
                                                                                                       lr: 2.560000000000001e-06
                              memory
episode: 2370
                score: 6.0
                              memory length: 546435
                                                       epsilon: 0.116056720008488
                                                                                      steps: 359
                                                                                                     lr: 2.560000000000001e-06
episode: 2371
                score: 6.0
                              memory length: 546799
                                                       epsilon: 0.1153360000084885
                                                                                       steps: 364
                                                                                                      lr: 2.560000000000001e-06
episode: 2372
                                                       epsilon: 0.11458360000848901
                                                                                                       lr: 2.560000000000001e-06
                score: 6.0
                                     length: 547179
                                                                                        steps: 380
                              memory
episode: 2373
                score: 7.0
                              memory length: 547569
                                                                                        steps: 390
                                                       epsilon: 0.11381140000848954
                                                                                                       lr: 2.560000000000001e-06
                              memory length: 548044
                                                                                        steps: 475
episode: 2374
                score: 8.0
                                                       epsilon: 0.11287090000849018
                                                                                                       lr: 2.560000000000001e-06
                                     length: 548524
episode: 2375
                score: 9.0
                                                       epsilon: 0.11192050000849083
                                                                                               480
                                                                                                           2.560000000000001e-06
                              memory
                                                                                        steps:
episode: 2376
                score: 6.0
                              memory length: 548882
                                                       epsilon: 0.11121166000849131
                                                                                        steps: 358
                                                                                                       lr: 2.560000000000001e-06
episode: 2377
                score: 6.0
                              memory length: 549220
                                                       epsilon: 0.11054242000849177
                                                                                        steps: 338
                                                                                                       lr: 2.560000000000001e-06
episode: 2378
                score: 4.0
                                     length: 549460
                                                       epsilon: 0.11006722000849209
                                                                                        steps: 240
                                                                                                       1r: 2.560000000000001e-06
                              memory
                                                                                        steps: 275
episode: 2379
                score: 4.0
                              memory length: 549735
                                                       epsilon: 0.10952272000849246
                                                                                                       lr: 2.560000000000001e-06
episode: 2380
                score: 7.0
                                     length: 550162
                                                       epsilon: 0.10867726000849304
                                                                                        steps: 427
                                                                                                       lr: 2.560000000000001e-06
                              memory
                score: 7.0
                                                                                       steps: 413
episode: 2381
                              memory length: 550575
                                                       epsilon: 0.1078595200084936
                                                                                                      lr: 2.560000000000001e-06
                                                       epsilon: 0.10686358000849427
episode: 2382
                score: 9.0
                              memory length: 551078
                                                                                        steps: 503
                                                                                                       lr: 2.560000000000001e-06
episode: 2383
                score: 4.0
                                     length: 551379
                                                       epsilon: 0.10626760000849468
                                                                                        steps: 301
                                                                                                       lr: 2.560000000000001e-06
                              memory
episode: 2384
                score: 6.0
                              memory length: 551714
                                                       epsilon: 0.10560430000849513
                                                                                        steps: 335
                                                                                                       lr: 2.560000000000001e-06
                              memory length: 552008
                                                       epsilon: 0.10502218000849553
episode: 2385
                score: 5.0
                                                                                        steps: 294
                                                                                                       lr: 2.560000000000001e-06
episode: 2386
                score: 10.0
                               memory length: 552403
                                                        epsilon: 0.10424008000849606
                                                                                         steps: 395
                                                                                                        lr: 2.560000000000001e-06
episode: 2387
                score: 4.0
                                                                                        steps: 276
                              memory length: 552679
                                                       epsilon: 0.10369360000849644
                                                                                                       lr: 2.560000000000001e-06
episode: 2388
                score: 5.0
                              memory length: 552966
                                                       epsilon: 0.10312534000849682
                                                                                        steps: 287
                                                                                                       lr: 2.5600000000000001e-06
                                                       epsilon: 0.10260658000849718
episode: 2389
                score: 4.0
                              memory
                                    length: 553228
                                                                                        steps: 262
                                                                                                       lr: 2.560000000000001e-06
episode: 2390
                score: 6.0
                              memory length: 553549
                                                       epsilon: 0.10197100000849761
                                                                                        steps: 321
                                                                                                       lr: 2.560000000000001e-06
episode: 2391
                score: 12.0
                              memory length: 553998
                                                        epsilon: 0.10108198000849822
                                                                                         steps: 449
                                                                                                        lr: 2.560000000000001e-06
episode: 2392
                score: 11.0
                               memory length: 554419
                                                        epsilon: 0.10024840000849879
                                                                                         steps: 421
                                                                                                        lr: 2.560000000000001e-06
                                                       epsilon: 0.09956332000849925
                                                                                        steps: 346
episode: 2393
                score: 9.0
                              memory length: 554765
                                                                                                       lr: 2.560000000000001e-06
episode: 2394
                              memory length: 555170
                score: 7.0
                                                       epsilon: 0.0987614200084998
                                                                                       steps: 405
                                                                                                      lr: 2.560000000000001e-06
episode: 2395
                score: 6.0
                              memory
                                     length: 555513
                                                       epsilon: 0.09808228000850026
                                                                                        steps: 343
                                                                                                       1r: 2.560000000000001e-06
episode: 2396
                              memory length: 555850
                                                       epsilon: 0.09741502000850072
                                                                                        steps: 337
                                                                                                       lr: 2.560000000000001e-06
                score: 6.0
episode: 2397
                score: 4.0
                                     length: 556110
                                                       epsilon: 0.09690022000850107
                                                                                        steps: 260
                                                                                                       lr: 2.560000000000001e-06
                              memory
episode: 2398
                score: 4.0
                              memory length: 556371
                                                       epsilon: 0.09638344000850142
                                                                                        steps: 261
                                                                                                       lr: 2.560000000000001e-06
episode: 2399
                score: 7.0
                              memory length: 556762
                                                       epsilon: 0.09560926000850195
                                                                                        steps: 391
                                                                                                       lr: 2.560000000000001e-06
episode: 2400
                score: 6.0
                                     length:
                                             557100
                                                       epsilon: 0.09494002000850241
                                                                                        steps: 338
                                                                                                           2.560000000000001e-06
                              memory
episode: 2401
                              memory length: 557455
                                                       epsilon: 0.09423712000850289
                                                                                        steps: 355
                score: 6.0
                                                                                                       lr: 2.560000000000001e-06
episode: 2402
                score: 5.0
                              memory length: 557764
                                                       epsilon: 0.0936253000085033
                                                                                       steps: 309
                                                                                                      lr: 2.560000000000001e-06
episode: 2403
                score: 6.0
                              memory length: 558119
                                                       epsilon: 0.09292240000850378
                                                                                        steps: 355
                                                                                                       lr: 2.560000000000001e-06
episode: 2404
                score: 14.0
                              memory length: 558583
                                                        epsilon: 0.09200368000850441
                                                                                         steps: 464
                                                                                                        lr: 2.560000000000001e-06
episode: 2405
                score: 9.0
                              memory length: 559038
                                                       epsilon: 0.09110278000850502
                                                                                        steps: 455
                                                                                                       lr: 2.560000000000001e-06
                              memory length: 559315
episode: 2406
                score: 4.0
                                                       epsilon: 0.0905543200085054
                                                                                       steps: 277
                                                                                                      lr: 2.560000000000001e-06
episode: 2407
                score: 6.0
                              memory length: 559638
                                                       epsilon: 0.08991478000850583
                                                                                        steps: 323
                                                                                                       lr: 2.560000000000001e-06
episode: 2408
                              memory length: 559962
                                                       epsilon: 0.08927326000850627
                                                                                        steps: 324
                score: 6.0
                                                                                                       lr: 2.560000000000001e-06
                                                       epsilon: 0.08859808000850673
episode: 2409
                score: 6.0
                              memory length: 560303
                                                                                        steps: 341
                                                                                                           2.560000000000001e-06
episode: 2410
                score: 4.0
                              memory length: 560598
                                                       epsilon: 0.08801398000850713
                                                                                        steps: 295
                                                                                                       lr: 2.560000000000001e-06
episode: 2411
                score: 10.0
                               memory length: 561136
                                                        epsilon: 0.08694874000850786
                                                                                         steps: 538
                                                                                                        lr: 2.5600000000000001e-06
episode: 2412
                score: 7.0
                              memory length: 561523
                                                       epsilon: 0.08618248000850838
                                                                                        steps: 387
                                                                                                       lr: 2.560000000000001e-06
                                                                                                       lr: 2.560000000000001e-06
episode: 2413
                score: 6.0
                              memory length: 561893
                                                       epsilon: 0.08544988000850888
                                                                                        steps: 370
episode: 2414
                score: 9.0
                              memory length: 562257
                                                       epsilon: 0.08472916000850937
                                                                                                       1r: 2.560000000000001e-06
                                                                                        steps: 364
episode: 2415
                score: 12.0
                              memory length: 562712
                                                        epsilon: 0.08382826000850999
                                                                                         steps: 455
                                                                                                        lr: 2.5600000000000001e-06
episode: 2416
                score: 5.0
                              memory length: 563001
                                                       epsilon: 0.08325604000851038
                                                                                        steps: 289
                                                                                                       lr: 2.5600000000000001e-06
episode: 2417
                score: 8.0
                              memory length: 563441
                                                       epsilon: 0.08238484000851097
                                                                                        steps: 440
                                                                                                           2.560000000000001e-06
episode: 2418
                score: 7.0
                              memory length: 563841
                                                       epsilon: 0.08159284000851151
                                                                                        steps: 400
                                                                                                       lr: 2.560000000000001e-06
episode: 2419
                score: 12.0
                               memory length: 564495
                                                        epsilon: 0.0802979200085124
                                                                                        steps: 654
                                                                                                       lr: 2.560000000000001e-06
episode: 2420
                              memory length: 564802
                                                       epsilon: 0.07969006000851281
                                                                                                           2.560000000000001e-06
                score: 5.0
                                                                                        steps: 307
episode: 2421
                score: 7.0
                              memory length: 565210
                                                       epsilon: 0.07888222000851336
                                                                                        steps: 408
                                                                                                       lr: 2.560000000000001e-06
episode: 2422
                              memory length: 565586
                                                                                        steps: 376
                score: 6.0
                                                       epsilon: 0.07813774000851387
                                                                                                       lr: 2.560000000000001e-06
                                                                                                       lr: 2.560000000000001e-06
episode: 2423
                score: 6.0
                                    length: 565921
                                                       epsilon: 0.07747444000851432
                                                                                        steps: 335
                              memory
episode: 2424
                score: 5.0
                              memory length: 566229
                                                       epsilon: 0.07686460000851474
                                                                                        steps: 308
                                                                                                       lr: 2.560000000000001e-06
episode: 2425
                score: 11.0
                              memory length: 566751
                                                        epsilon: 0.07583104000851544
                                                                                         steps: 522
                                                                                                        lr: 2.560000000000001e-06
episode: 2426
                score: 7.0
                              memory length: 567139
                                                       epsilon: 0.07506280000851596
                                                                                        steps: 388
                                                                                                       1r: 2.560000000000001e-06
                                                                                        steps: 339
episode: 2427
                score: 6.0
                              memory length: 567478
                                                       epsilon: 0.07439158000851642
                                                                                                       lr: 2.560000000000001e-06
episode: 2428
                score: 7.0
                                     length: 567830
                                                       epsilon: 0.0736946200085169
                                                                                       steps: 352
                                                                                                      1r: 2.560000000000001e-06
                              memory
episode: 2429
                score: 4.0
                              memory length: 568106
                                                       epsilon: 0.07314814000851727
                                                                                        steps: 276
                                                                                                       lr: 2.5600000000000001e-06
episode: 2430
                score: 7.0
                              memory length: 568454
                                                       epsilon: 0.07245910000851774
                                                                                        steps: 348
                                                                                                       lr: 2.560000000000001e-06
                score: 5.0
                                     length: 568744
                                                                                        steps: 290
episode: 2431
                                                       epsilon: 0.07188490000851813
                                                                                                       lr:
                                                                                                           2.560000000000001e-06
                              memory
episode: 2432
                score: 7.0
                              memory length: 569117
                                                       epsilon: 0.07114636000851864
                                                                                        steps: 373
                                                                                                       lr: 2.560000000000001e-06
episode: 2433
                score: 6.0
                              memory length: 569511
                                                       epsilon: 0.07036624000851917
                                                                                        steps: 394
                                                                                                       1r: 2.560000000000001e-06
episode: 2434
                score: 9.0
                                     length: 569963
                                                       epsilon: 0.06947128000851978
                                                                                        steps: 452
                                                                                                           2.56000000000001e-06
                              memory
episode: 2435
                score: 7.0
                              memory length: 570333
                                                       epsilon: 0.06873868000852028
                                                                                        steps: 370
                                                                                                       lr: 2.560000000000001e-06
episode: 2436
                score: 9.0
                              memory length: 570839
                                                       epsilon: 0.06773680000852096
                                                                                        steps: 506
                                                                                                       1r: 2.560000000000001e-06
episode: 2437
                score: 4.0
                                     length: 571099
                                                       epsilon: 0.06722200000852131
                                                                                        steps: 260
                                                                                                           2.560000000000001e-06
                              memory
episode: 2438
                score: 5.0
                              memory length: 571410
                                                       epsilon: 0.06660622000852173
                                                                                        steps: 311
                                                                                                       lr: 2.560000000000001e-06
episode: 2439
                              memory length: 571816
                score: 7.0
                                                       epsilon: 0.06580234000852228
                                                                                        steps: 406
                                                                                                       lr: 2.560000000000001e-06
episode: 2440
                score: 5.0
                                     length: 572128
                                                       epsilon: 0.0651845800085227
                                                                                       steps: 312
                                                                                                      1r: 2.560000000000001e-06
                              memory
episode: 2441
                score: 6.0
                              memory length: 572468
                                                       epsilon: 0.06451138000852316
                                                                                        steps: 340
                                                                                                       lr: 2.560000000000001e-06
episode: 2442
                              memory length: 572776
                score: 5.0
                                                       epsilon: 0.06390154000852358
                                                                                        steps: 308
                                                                                                       lr: 2.560000000000001e-06
episode: 2443
                score: 6.0
                              memory length: 573161
                                                       epsilon: 0.0631392400085241
                                                                                       steps: 385
                                                                                                      lr: 2.560000000000001e-06
                                                       epsilon: 0.0624066400085246
episode: 2444
                score: 7.0
                              memory length: 573531
                                                                                       steps: 370
                                                                                                      lr: 2.560000000000001e-06
episode: 2445
                score: 7.0
                                     length: 573902
                                                       epsilon: 0.0616720600085251
                                                                                       steps: 371
                                                                                                      1r: 2.560000000000001e-06
                              memory
episode: 2446
                                                       epsilon: 0.06100678000852555
                                                                                        steps: 336
                score: 6.0
                              memory length: 574238
                                                                                                       lr: 2.560000000000001e-06
episode: 2447
                score: 6.0
                              memory length: 574595
                                                       epsilon: 0.060299920008526034
                                                                                         steps: 357
                                                                                                        lr: 2.5600000000000001e-06
episode: 2448
                score: 5.0
                                     length: 574898
                                                       epsilon: 0.05969998000852644
                                                                                        steps: 303
                                                                                                       lr: 2.560000000000001e-06
                              memory
episode: 2449
                score: 7.0
                                                                                        steps: 369
                              memory length: 575267
                                                       epsilon: 0.05896936000852694
                                                                                                       lr: 2.560000000000001e-06
                              memory length: 575594
episode: 2450
                score: 5.0
                                                       epsilon: 0.05832190000852738
                                                                                        steps: 327
                                                                                                       1r: 2.560000000000001e-06
                                                       epsilon: 0.05758138000852789
                                                                                                       lr: 2.560000000000001e-06
episode: 2451
                score: 6.0
                              memory length: 575968
                                                                                        steps: 374
episode: 2452
                score: 11.0
                               memory length: 576385
                                                        epsilon: 0.05675572000852845
                                                                                         steps: 417
                                                                                                        lr: 2.5600000000000001e-06
```





# Visualize Agent Performance

BE AWARE THIS CODE BELOW MAY CRASH THE KERNEL IF YOU RUN THE SAME CELL TWICE.

Please save your model before running this portion of the code.

```
torch.save(agent.policy_net, "./save_model/breakout_dqn_agent_v4.pth")
     /usr/local/lib/python3.10/dist-packages/ipykernel/ipkernel.py:283: DeprecationWarning: `should_run_async` will not call `trar
      and should run async(code)
from gym.wrappers import RecordVideo # If importing monitor raises issues, try using `from gym.wrappers import RecordVideo`
import glob
import io
import base64
from IPython.display import HTML
from IPython import display as ipythondisplay
from pyvirtualdisplay import Display
# Displaying the game live
def show_state(env, step=0, info=""):
    plt.figure(3)
   plt.clf()
   plt.imshow(env.render(mode='rgb_array'))
   plt.title("%s | Step: %d %s" % ("Agent Playing",step, info))
   plt.axis('off')
    ipythondisplay.clear_output(wait=True)
    ipythondisplay.display(plt.gcf())
# Recording the game and replaying the game afterwards
def show_video():
   mp4list = glob.glob('video/*.mp4')
    if len(mp4list) > 0:
        mp4 = mp4list[0]
        video = io.open(mp4, 'r+b').read()
        encoded = base64.b64encode(video)
        ipythondisplay.display(HTML(data='''<video alt="test" autoplay</pre>
```

```
loop controls style="height: 400px;">
                <source src="data:video/mp4;base64,{0}" type="video/mp4" />
             </video>'''.format(encoded.decode('ascii'))))
    else:
        print("Could not find video")
def wrap_env(env):
   env = RecordVideo(env, './video')
    return env
import warnings
warnings.filterwarnings('ignore', category=UserWarning)
warnings.filterwarnings('ignore', category=DeprecationWarning)
display = Display(visible=0, size=(300, 200))
display.start()
# Load agent
agent.load_policy_net("./save_model/breakout_dqn_agent_v4.pth")
agent.epsilon = 0.0 # Set agent to only exploit the best action
env = gym.make('BreakoutDeterministic-v4', render_mode='rgb_array')
env = wrap_env(env)
done = False
score = 0
step = 0
state = env.reset()
next state = state
life = number_lives
history = np.zeros([5, 84, 84], dtype=np.uint8)
get init state(history, state, 5)
while not done:
    # Render breakout
    env.render()
     show_state(env,step) # uncommenting this provides another way to visualize the game
    step += 1
    frame += 1
    # Perform a fire action if ball is no longer on screen
    if step > 1 and len(np.unique(next_state[:189] == state[:189])) < 2:</pre>
        action = 0
    else:
       action = agent.get action(np.float32(history[:4, :, :]) / 255.)
    state = next_state
    next state, reward, done, info = env.step(action + 1)
    frame_next_state = get_frame(next_state)
    history[4, :, :] = frame_next_state
    terminal_state = check_live(life, info['lives'])
    life = info['lives']
    r = np.clip(reward, -1, 1)
    r = reward
    # Store the transition in memory
    agent.memory.push(deepcopy(frame_next_state), action, r, terminal_state)
    # Start training after random sample generation
    score += reward
   history[:4, :, :] = history[1:, :, :]
env.close()
show video()
display.stop()
```

## → Double DQN

## Creating a DQN Agent

Here we create a DQN Agent. This agent is defined in the **agent.py**. The corresponding neural network is defined in the **model.py**. Once you've created a working DQN agent, use the code in agent.py to create a double DQN agent in **agent\_double.py**. Set the flag "double\_dqn" to True to train the double DQN agent.

Evaluation Reward: The average reward received in the past 100 episodes/games.

Frame: Number of frames processed in total.

Memory Size: The current size of the replay memory.

```
double_dqn = True # set to True if using double DQN agent

if double_dqn:
    from agent_double import Agent
else:
    from agent import Agent

agent = Agent(action_size)
evaluation_reward = deque(maxlen=evaluation_reward_length)
frame = 0
memory_size = 0

$load_ext autoreload
%autoreload 2

    cuda:0
    The autoreload extension is already loaded. To reload it, use:
        %reload_ext autoreload
```

#### ▼ Main Training Loop for DQN

In this training loop, we do not render the screen because it slows down training signficantly. To watch the agent play the game, run the code in next section "Visualize Agent Performance"

```
rewards, episodes = [], []
best_eval_reward = 0
for e in range(2500):
    done = False
    score = 0

    history = np.zeros([5, 84, 84], dtype=np.uint8)
    step = 0
    state = env.reset()
    next_state = state
    life = number_lives

    get_init_state(history, state, HISTORY_SIZE)
```

```
while not done:
    step += 1
    frame += 1
    # Perform a fire action if ball is no longer on screen to continue onto next life
    if step > 1 and len(np.unique(next_state[:189] == state[:189])) < 2:</pre>
    else:
       action = agent.get action(np.float32(history[:4, :, :]) / 255.)
    state = next state
    next state, reward, done, info = env.step(action + 1)
    frame_next_state = get_frame(next_state)
    history[4, :, :] = frame next state
    terminal_state = check_live(life, info['lives'])
    life = info['lives']
    r = reward
    # Store the transition in memory
    agent.memory.push(deepcopy(frame_next_state), action, r, terminal_state)
    # Start training after random sample generation
    if(frame >= train_frame):
        agent.train policy net(frame)
        # Update the target network only for Double DQN only
        if double_dqn and (frame % update_target_network_frequency) == 0:
           agent.update target net()
    score += reward
    history[:4, :, :] = history[1:, :, :]
    if done:
        evaluation reward.append(score)
        rewards.append(np.mean(evaluation reward))
        episodes.append(e)
        pylab.plot(episodes, rewards, 'b')
        pylab.xlabel('Episodes')
        pylab.ylabel('Rewards')
        pylab.title('Episodes vs Reward')
        pylab.savefig("./save_graph/breakout_dqn_agent_v3_pallaw.png") # save graph for training visualization
        # every episode, plot the play time
        print("episode:", e, " score:", score, " memory length:",
             evaluation reward:", np.mean(evaluation_reward))
        # if the mean of scores of last 100 episode is bigger than 5 save model
        ### Change this save condition to whatever you prefer ###
        if np.mean(evaluation_reward) > 5 and np.mean(evaluation_reward) > best_eval_reward:
           torch.save(agent.policy_net, "./save_model/breakout_dqn_agent pallaw.pth")
           best_eval_reward = np.mean(evaluation_reward)
```

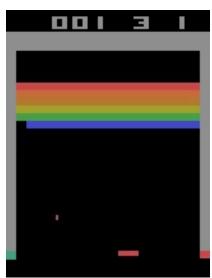
```
epsilon: 1.0
                                                                                lr: 0.0001
episode: 0
             score: 3.0
                           memory length: 244
                                                                  steps: 244
                                                                                                evaluation reward: 3.0
             score: 1.0
                           memory length: 396
                                                 epsilon: 1.0
                                                                  steps: 152
                                                                                lr: 0.0001
                                                                                                evaluation reward: 2.0
episode: 1
episode: 2
                                                                                                evaluation reward: 2.3333333
             score: 3.0
                           memory length: 662
                                                 epsilon: 1.0
                                                                  steps: 266
                                                                                lr: 0.0001
                                                 epsilon: 1.0
                                                                  steps: 170
episode: 3
             score: 1.0
                           memory length: 832
                                                                                lr: 0.0001
                                                                                                evaluation reward: 2.0
episode: 4
             score: 3.0
                           memory length: 1099
                                                  epsilon: 1.0
                                                                   steps: 267
                                                                                 1r: 0.0001
                                                                                                 evaluation reward: 2.2
             score: 2.0
                                                  epsilon: 1.0
                                                                   steps: 202
                                                                                                 evaluation reward: 2.166666
episode: 5
                           memory length: 1301
                                                                                 lr: 0.0001
             score: 1.0
                           memory length: 1474
                                                  epsilon: 1.0
                                                                                 lr: 0.0001
                                                                                                 evaluation reward: 2.0
episode: 6
                                                                   steps: 173
episode: 7
             score: 2.0
                           memory length: 1673
                                                  epsilon: 1.0
                                                                   steps: 199
                                                                                 lr: 0.0001
                                                                                                 evaluation reward: 2.0
                           memory length: 1797
                                                  epsilon: 1.0
                                                                   steps: 124
                                                                                  lr: 0.0001
                                                                                                 evaluation reward: 1.777777
episode: 8
             score: 0.0
episode: 9
             score: 2.0
                           memory length: 1996
                                                  epsilon: 1.0
                                                                   steps: 199
                                                                                 lr: 0.0001
                                                                                                 evaluation reward: 1.8
                            memory length: 2196
                                                   epsilon: 1.0
                                                                    steps: 200
                                                                                  1r: 0.0001
episode: 10
              score: 2.0
                                                                                                  evaluation reward: 1.81818
episode: 11
                            memory length: 2415
              score: 2.0
                                                   epsilon: 1.0
                                                                    steps: 219
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.83333
episode: 12
              score: 0.0
                            memory length: 2539
                                                   epsilon: 1.0
                                                                    steps: 124
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.69230
                            memory length: 2662
episode: 13
              score: 0.0
                                                   epsilon: 1.0
                                                                    steps: 123
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.57142
episode: 14
              score: 2.0
                            memory length: 2860
                                                   epsilon: 1.0
                                                                    steps: 198
                                                                                  1r: 0.0001
                                                                                                  evaluation reward: 1.6
episode: 15
              score: 3.0
                            memory length: 3128
                                                   epsilon: 1.0
                                                                    steps: 268
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.6875
episode: 16
              score: 2.0
                            memory length: 3327
                                                   epsilon: 1.0
                                                                    steps: 199
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.70588
                                                   epsilon: 1.0
                                                                    steps: 227
                            memory length: 3554
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.77777
episode: 17
              score: 3.0
                                                   epsilon: 1.0
episode: 18
              score: 4.0
                            memory length: 3851
                                                                    steps: 297
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.89473
episode: 19
              score: 0.0
                            memory length: 3975
                                                   epsilon: 1.0
                                                                    steps: 124
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.8
episode: 20
              score: 0.0
                            memory length: 4098
                                                   epsilon: 1.0
                                                                    steps: 123
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.71428
episode: 21
              score: 2.0
                            memory length: 4297
                                                   epsilon: 1.0
                                                                    steps: 199
                                                                                  1r: 0.0001
                                                                                                  evaluation reward: 1.72727
                            memory length: 4420
                                                   epsilon: 1.0
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.65217
episode: 22
              score: 0.0
                                                                    steps: 123
episode: 23
              score: 2.0
                            memory length: 4622
                                                   epsilon: 1.0
                                                                    steps: 202
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.66666
episode: 24
              score: 2.0
                            memory length: 4823
                                                   epsilon: 1.0
                                                                    steps: 201
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.68
episode: 25
                            memory length: 4976
                                                   epsilon: 1.0
                                                                    steps: 153
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.65384
              score: 1.0
episode: 26
              score: 0.0
                            memory length: 5099
                                                   epsilon: 1.0
                                                                    steps: 123
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.59259
                            memory length: 5298
episode: 27
                                                   epsilon: 1.0
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1,60714
              score: 2.0
                                                                    steps: 199
                            memory length: 5587
episode: 28
              score: 5.0
                                                   epsilon: 1.0
                                                                    steps: 289
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.72413
episode: 29
              score: 3.0
                            memory length: 5833
                                                   epsilon: 1.0
                                                                    steps: 246
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.76666
                            memory length: 5957
episode: 30
                                                   epsilon: 1.0
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.70967
              score: 0.0
                                                                    steps: 124
episode: 31
              score: 0.0
                            memory length: 6080
                                                   epsilon: 1.0
                                                                    steps: 123
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.65625
                            memory length: 6349
episode: 32
              score: 3.0
                                                   epsilon: 1.0
                                                                    steps: 269
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.69696
episode: 33
              score: 2.0
                            memory length: 6547
                                                   epsilon: 1.0
                                                                    steps: 198
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.70588
                            memory length: 6728
                                                   epsilon: 1.0
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.71428
episode: 34
              score: 2.0
                                                                    steps: 181
episode: 35
              score: 0.0
                            memory length: 6852
                                                   epsilon: 1.0
                                                                    steps: 124
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.66666
episode: 36
              score: 2.0
                            memory length: 7051
                                                   epsilon: 1.0
                                                                    steps: 199
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.67567
                            memory length: 7175
                                                   epsilon: 1.0
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.63157
episode: 37
              score: 0.0
                                                                    steps: 124
episode: 38
              score: 2.0
                            memory length: 7373
                                                   epsilon: 1.0
                                                                    steps: 198
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.64102
                            memory length: 7645
                                                   epsilon: 1.0
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.675
episode: 39
              score: 3.0
                                                                    steps: 272
              score: 1.0
                            memory length: 7797
                                                   epsilon: 1.0
episode: 40
                                                                    steps: 152
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.65853
                            memory length: 8075
                                                   epsilon: 1.0
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.71428
episode: 41
              score: 4.0
                                                                    steps: 278
episode: 42
              score: 2.0
                            memory length: 8292
                                                   epsilon: 1.0
                                                                    steps: 217
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.72093
episode: 43
              score: 3.0
                            memory length: 8541
                                                   epsilon: 1.0
                                                                    steps: 249
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.75
                                                                    steps: 246
episode: 44
                            memory length: 8787
                                                   epsilon: 1.0
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.77777
              score: 3.0
episode: 45
              score: 1.0
                            memory length: 8957
                                                   epsilon: 1.0
                                                                    steps: 170
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.76086
episode: 46
              score: 3.0
                            memory length: 9186
                                                   epsilon: 1.0
                                                                    steps: 229
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.78723
episode: 47
                            memory length: 9433
                                                   epsilon: 1.0
                                                                    steps: 247
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.8125
              score: 3.0
                                                   epsilon: 1.0
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.79591
episode: 48
              score: 1.0
                            memory length: 9603
                                                                    steps: 170
episode: 49
                            memory length: 9832
                                                   epsilon: 1.0
                                                                    steps: 229
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.82
              score: 3.0
episode: 50
              score: 1.0
                            memory length: 9985
                                                   epsilon: 1.0
                                                                    steps: 153
                                                                                  lr: 0.0001
                                                                                                  evaluation reward: 1.80392
                                                                                                   evaluation reward: 1.8076
episode: 51
              score: 2.0
                            memory length: 10186
                                                    epsilon: 1.0
                                                                     steps: 201
                                                                                   lr: 0.0001
episode: 52
              score: 3.0
                            memory length: 10454
                                                    epsilon: 1.0
                                                                     steps: 268
                                                                                   lr: 0.0001
                                                                                                   evaluation reward: 1.8301
                                                    epsilon: 1.0
                                                                                    lr: 0.0001
                                                                                                   evaluation reward: 1.8333
episode: 53
              score: 2.0
                            memory length: 10670
                                                                     steps: 216
              score: 3.0
                            memory length: 10900
                                                    epsilon: 1.0
                                                                     steps: 230
                                                                                   lr: 0.0001
                                                                                                   evaluation reward: 1.8545
episode: 54
                            memory length: 11081
                                                                                   lr: 0.0001
                                                    epsilon: 1.0
                                                                                                   evaluation reward: 1.8571
episode: 55
              score: 2.0
                                                                     steps: 181
episode: 56
                            memory length: 11345
                                                    epsilon: 1.0
                                                                     steps: 264
                                                                                    lr: 0.0001
                                                                                                   evaluation reward: 1.8771
              score: 3.0
episode: 57
              score: 0.0
                            memory length: 11468
                                                    epsilon: 1.0
                                                                     steps: 123
                                                                                    lr: 0.0001
                                                                                                   evaluation reward: 1.8448
episode: 58
                            memory length: 11620
                                                    epsilon: 1.0
                                                                                    lr: 0.0001
                                                                     steps: 152
                                                                                                   evaluation reward: 1.8305
              score: 1.0
episode: 59
              score: 1.0
                            memory length: 11790
                                                    epsilon: 1.0
                                                                     steps: 170
                                                                                    lr: 0.0001
                                                                                                   evaluation reward: 1.8166
episode: 60
              score: 3.0
                            memory length: 12034
                                                    epsilon: 1.0
                                                                     steps: 244
                                                                                    lr: 0.0001
                                                                                                   evaluation reward: 1.8360
episode: 61
              score: 0.0
                            memory length: 12158
                                                    epsilon: 1.0
                                                                     steps: 124
                                                                                    lr: 0.0001
                                                                                                   evaluation reward: 1.8064
episode: 62
              score: 2.0
                            memory length: 12357
                                                    epsilon: 1.0
                                                                     steps: 199
                                                                                    lr: 0.0001
                                                                                                   evaluation reward: 1.8095
                            memory length: 12556
                                                                     steps: 199
episode: 63
                                                    epsilon: 1.0
                                                                                    lr: 0.0001
                                                                                                   evaluation reward: 1.8125
              score: 2.0
episode: 64
              score: 2.0
                            memory length: 12754
                                                    epsilon: 1.0
                                                                     steps: 198
                                                                                   lr: 0.0001
                                                                                                   evaluation reward: 1.8153
              score: 4.0
                            memory length: 13045
                                                    epsilon: 1.0
                                                                     steps: 291
                                                                                    1r: 0.0001
                                                                                                   evaluation reward: 1.8484
episode: 65
episode: 66
                            memory length: 13215
                                                    epsilon: 1.0
                                                                     steps: 170
                                                                                    lr: 0.0001
                                                                                                   evaluation reward: 1.8358
              score: 1.0
episode: 67
              score: 0.0
                            memory length: 13339
                                                    epsilon: 1.0
                                                                     steps: 124
                                                                                    lr: 0.0001
                                                                                                   evaluation reward: 1.8088
                            memory length: 13558
                                                    epsilon: 1.0
                                                                     steps: 219
                                                                                    lr: 0.0001
                                                                                                   evaluation reward: 1.8115
episode: 68
              score: 2.0
episode: 69
              score: 2.0
                            memory length: 13775
                                                    epsilon: 1.0
                                                                     steps: 217
                                                                                    lr: 0.0001
                                                                                                   evaluation reward: 1.8142
episode: 70
              score: 0.0
                            memory length: 13899
                                                    epsilon: 1.0
                                                                     steps: 124
                                                                                    lr: 0.0001
                                                                                                   evaluation reward: 1.7887
episode: 71
              score: 0.0
                            memory length: 14022
                                                    epsilon: 1.0
                                                                     steps: 123
                                                                                   lr: 0.0001
                                                                                                   evaluation reward: 1.7638
                                                                                   lr: 0.0001
episode: 72
              score: 3.0
                            memory length: 14289
                                                    epsilon: 1.0
                                                                     steps: 267
                                                                                                   evaluation reward: 1.7808
                            memory length: 14508
episode: 73
              score: 2.0
                                                    epsilon: 1.0
                                                                     steps: 219
                                                                                    lr: 0.0001
                                                                                                   evaluation reward: 1.7837
episode: 74
              score: 0.0
                            memory length: 14631
                                                    epsilon: 1.0
                                                                     steps: 123
                                                                                    lr: 0.0001
                                                                                                   evaluation reward: 1.76
                            memory length: 14849
episode: 75
                                                    epsilon: 1.0
                                                                     steps: 218
                                                                                    lr: 0.0001
                                                                                                   evaluation reward: 1.7631
              score: 2.0
episode: 76
              score: 2.0
                            memory length: 15069
                                                    epsilon: 1.0
                                                                     steps: 220
                                                                                   lr: 0.0001
                                                                                                   evaluation reward: 1.7662
episode: 77
              score: 1.0
                            memory length: 15239
                                                    epsilon: 1.0
                                                                     steps: 170
                                                                                    lr: 0.0001
                                                                                                   evaluation reward: 1.7564
episode: 78
              score: 0.0
                                                    epsilon: 1.0
                                                                     steps: 123
                                                                                    lr: 0.0001
                            memory length: 15362
                                                                                                   evaluation reward: 1.7341
episode: 79
              score: 0.0
                            memory length: 15486
                                                    epsilon: 1.0
                                                                     steps: 124
                                                                                    1r: 0.0001
                                                                                                   evaluation reward: 1.7125
episode: 80
                            memory length: 15659
                                                    epsilon: 1.0
                                                                     steps: 173
                                                                                    lr: 0.0001
                                                                                                   evaluation reward: 1.7037
              score: 1.0
episode: 81
              score: 2.0
                            memory length: 15858
                                                    epsilon: 1.0
                                                                     steps: 199
                                                                                    lr: 0.0001
                                                                                                   evaluation reward: 1.7073
episode: 82
              score: 0.0
                            memory length: 15982
                                                    epsilon: 1.0
                                                                     steps: 124
                                                                                    lr: 0.0001
                                                                                                   evaluation reward: 1.6867
episode: 83
              score: 0.0
                            memory length: 16106
                                                    epsilon: 1.0
                                                                     steps: 124
                                                                                    lr: 0.0001
                                                                                                   evaluation reward: 1.6666
```

## Visualize Agent Performance

```
memory length: 1/106 epsilon: 1.0
     episode: 89
                  score: 4.0
                                                                       steps: 2/8
                                                                                      r: 0.0001
                                                                                                     evaluation reward: 1.6333
BE AWARE THIS CODE BELOW MAY CRASH THE KERNEL IF YOU RUN THE SAME CELL TWICE.
Please save your model before running this portion of the code.
     episode: 94
                  score: 3.0
                              memory rength: 1/991
                                                       epsiton: 1.0
                                                                     steps: 200
                                                                                     TT: O.OOOT
                                                                                                     evaluation reward: 1.0103
torch.save(agent.policy_net, "./save_model/breakout_dqn_agent_v4.pth")
     /usr/local/lib/python3.10/dist-packages/ipykernel/ipkernel.py:283: DeprecationWarning: `should_run_async` will not call `tran
      and should_run_async(code)
     episode: ivv
                   score: 2.0
                                memory rength: Tabar ebstron: 1.0
                                                                        steps: 219
                                                                                       TT: O.OOOT
                                                                                                      evaluation reward: 1.09
from gym.wrappers import RecordVideo # If importing monitor raises issues, try using `from gym.wrappers import RecordVideo`
import glob
import io
import base64
{\tt from~IPython.display~import~HTML}
from IPython import display as ipythondisplay
from pyvirtualdisplay import Display
# Displaying the game live
def show state(env, step=0, info=""):
    plt.figure(3)
    plt.clf()
    plt.imshow(env.render(mode='rgb_array'))
    plt.title("%s | Step: %d %s" % ("Agent Playing", step, info))
   plt.axis('off')
    ipythondisplay.clear output(wait=True)
    ipythondisplay.display(plt.gcf())
# Recording the game and replaying the game afterwards
def show video():
    mp4list = glob.glob('video/*.mp4')
    if len(mp4list) > 0:
        mp4 = mp4list[0]
        video = io.open(mp4, 'r+b').read()
        encoded = base64.b64encode(video)
        ipythondisplay.display(HTML(data='''<video alt="test" autoplay</pre>
                loop controls style="height: 400px;">
                <source src="data:video/mp4;base64,{0}" type="video/mp4" />
             </ri></video>'''.format(encoded.decode('ascii'))))
    else:
        print("Could not find video")
def wrap env(env):
    env = RecordVideo(env, './video')
    return env
    enisode: 145 score: 0.0 memory length: 27920 ensilon: 1.0
                                                                        steps: 123
                                                                                       1r: 0.0001
                                                                                                      evaluation reward: 1.59
import warnings
warnings.filterwarnings('ignore', category=UserWarning)
warnings.filterwarnings('ignore', category=DeprecationWarning)
display = Display(visible=0, size=(300, 200))
display.start()
# Load agent
agent.load_policy_net("./save_model/breakout_dqn_agent_v4.pth")
agent.epsilon = 0.0 # Set agent to only exploit the best action
env = gym.make('BreakoutDeterministic-v4', render_mode='rgb_array')
env = wrap env(env)
done = False
score = 0
step = 0
state = env.reset()
next state = state
life = number lives
```

display.stop()

```
history = np.zeros([5, 84, 84], dtype=np.uint8)
get init state(history, state, 5)
while not done:
    # Render breakout
    env.render()
      show_state(env,step) # uncommenting this provides another way to visualize the game
    frame += 1
    # Perform a fire action if ball is no longer on screen
    if step > 1 and len(np.unique(next state[:189] == state[:189])) < 2:
    else:
        action = agent.get action(np.float32(history[:4, :, :]) / 255.)
    state = next_state
    next_state, reward, done, info = env.step(action + 1)
    frame_next_state = get_frame(next_state)
    history[4, :, :] = frame_next_state
    terminal_state = check_live(life, info['lives'])
   life = info['lives']
    r = np.clip(reward, -1, 1)
    r = reward
    # Store the transition in memory
    agent.memory.push(deepcopy(frame_next_state), action, r, terminal_state)
    # Start training after random sample generation
    score += reward
   history[:4, :, :] = history[1:, :, :]
env.close()
show_video()
```



<pyvirtualdisplay.display.Display at 0x7f20a98d67d0>

```
-------
                                                                ------
episode: 237
             score: 0.0
                          memory length: 44880
                                                 epsilon: 1.0
                                                                             lr: 0.0001
                                                                steps: 124
                                                                                            evaluation reward: 1.5
episode: 238 score: 1.0 memory length: 45032
                                                epsilon: 1.0
                                                                steps: 152
                                                                             lr: 0.0001
                                                                                            evaluation reward: 1.51
episode: 239
             score: 1.0
                          memory length: 45184
                                                 epsilon: 1.0
                                                                steps: 152
                                                                              lr: 0.0001
                                                                                            evaluation reward: 1.5
episode: 240 score: 1.0 memory length: 45353
                                                epsilon: 1.0
                                                                steps: 169
                                                                             lr: 0.0001
                                                                                            evaluation reward: 1.49
episode: 241 score: 0.0 memory length: 45476
                                                epsilon: 1.0
                                                                steps: 123
                                                                             lr: 0.0001
                                                                                            evaluation reward: 1.49
                          memory length: 45599
                                                                                            evaluation reward: 1.49
episode: 242
             score: 0.0
                                                 epsilon: 1.0
                                                                steps: 123
                                                                             lr: 0.0001
episode: 243 score: 1.0 memory length: 45771
                                                epsilon: 1.0
                                                                steps: 172
                                                                             lr: 0.0001
                                                                                            evaluation reward: 1.47
episode: 244
             score: 2.0 memory length: 45975
                                                 epsilon: 1.0
                                                                steps: 204
                                                                             lr: 0.0001
                                                                                            evaluation reward: 1.46
episode: 245
             score: 1.0
                          memory length: 46145
                                                 epsilon: 1.0
                                                                steps: 170
                                                                             lr: 0.0001
                                                                                            evaluation reward: 1.47
episode: 246
             score: 1.0 memory length: 46297
                                                 epsilon: 1.0
                                                                steps: 152
                                                                             lr: 0.0001
                                                                                            evaluation reward: 1.45
                          memory length: 46420
                                                                             lr: 0.0001
episode: 247
             score: 0.0
                                                 epsilon: 1.0
                                                                steps: 123
                                                                                            evaluation reward: 1.45
episode: 248
              score: 2.0
                          memory length: 46605
                                                 epsilon: 1.0
                                                                steps: 185
                                                                             lr: 0.0001
                                                                                            evaluation reward: 1.47
episode: 249
             score: 2.0
                          memory length: 46825
                                                 epsilon: 1.0
                                                                steps: 220
                                                                             lr: 0.0001
                                                                                            evaluation reward: 1.48
episode: 250
             score: 0.0
                          memory length: 46949
                                                 epsilon: 1.0
                                                                steps: 124
                                                                             lr: 0.0001
                                                                                            evaluation reward: 1.47
              score: 1.0
                          memory length: 47100
episode: 251
                                                 epsilon: 1.0
                                                                              lr: 0.0001
                                                                steps: 151
                                                                                            evaluation reward: 1.46
episode: 252
              score: 2.0
                          memory length: 47302
                                                 epsilon: 1.0
                                                                steps: 202
                                                                              lr: 0.0001
                                                                                            evaluation reward: 1.45
episode: 253
              score: 0.0
                          memory length: 47426
                                                 epsilon: 1.0
                                                                              lr: 0.0001
                                                                                            evaluation reward: 1.44
                                                                steps: 124
```

```
episode: 254
               score: 0.0
                            memory length: 47550
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.42
episode: 255
               score: 0.0
                            memory length: 47673
                                                     epsilon: 1.0
                                                                      steps: 123
                                                                                    1r: 0.0001
                                                                                                    evaluation reward: 1.4
                                                                                    lr: 0.0001
episode: 256
               score: 4.0
                             memory length: 47946
                                                     epsilon: 1.0
                                                                      steps: 273
                                                                                                    evaluation reward: 1.42
episode: 257
               score: 2.0
                             memory length: 48145
                                                     epsilon: 1.0
                                                                      steps: 199
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.4
                             memory length: 48391
                                                     epsilon: 1.0
                                                                      steps: 246
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.43
episode: 258
               score: 3.0
episode: 259
               score: 3.0
                             memory length: 48625
                                                     epsilon: 1.0
                                                                      steps: 234
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.44
                             memory length: 48965
                                                     epsilon: 1.0
                                                                      steps: 340
                                                                                                    evaluation reward: 1.51
episode: 260
               score: 8.0
                                                                                    lr: 0.0001
episode: 261
               score: 0.0
                             memory length: 49089
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.5
episode: 262
               score: 4.0
                             memory length: 49341
                                                     epsilon: 1.0
                                                                      steps: 252
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.53
                                                                      steps: 199
               score: 2.0
                             memory length: 49540
                                                     epsilon: 1.0
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.52
episode: 263
episode: 264
               score: 2.0
                             memory length: 49721
                                                     epsilon: 1.0
                                                                      steps: 181
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.53
                             memory length: 49872
                                                     epsilon: 1.0
episode: 265
                                                                      steps: 151
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.5
               score: 1.0
episode: 266
               score: 1.0
                             memory length: 50044
                                                     epsilon: 1.0
                                                                      steps: 172
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.48
episode: 267
               score: 3.0
                             memory length: 50292
                                                     epsilon: 1.0
                                                                      steps: 248
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.51
episode: 268
                             memory length: 50445
                                                     epsilon: 1.0
                                                                      steps: 153
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.5
               score: 1.0
episode: 269
               score: 1.0
                            memory length: 50614
                                                     epsilon: 1.0
                                                                      steps: 169
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.49
                                                                      steps: 229
episode: 270
               score: 3.0
                             memory length: 50843
                                                     epsilon: 1.0
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.52
episode: 271
               score: 4.0
                             memory length: 51140
                                                     epsilon: 1.0
                                                                      steps: 297
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.53
                            memory length: 51360
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.47
episode: 272
               score: 2.0
                                                     epsilon: 1.0
                                                                      steps: 220
                                                     epsilon: 1.0
episode: 273
               score: 3.0
                             memory length: 51608
                                                                      steps: 248
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.49
                                                     epsilon: 1.0
episode: 274
               score: 1.0
                             memory length: 51777
                                                                      steps: 169
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.5
episode: 275
               score: 2.0
                             memory length: 51995
                                                     epsilon: 1.0
                                                                      steps: 218
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.52
episode: 276
               score: 3.0
                             memory length: 52221
                                                     epsilon: 1.0
                                                                      steps: 226
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.54
                             memory length: 52345
                                                     epsilon: 1.0
episode: 277
               score: 0.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.54
episode: 278
                                                                                                    evaluation reward: 1.53
               score: 0.0
                             memory length: 52469
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                     epsilon: 1.0
episode: 279
               score: 0.0
                             memory length: 52592
                                                                      steps: 123
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.51
episode: 280
               score: 2.0
                             memory length: 52773
                                                     epsilon: 1.0
                                                                      steps: 181
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.51
episode: 281
               score: 3.0
                             memory length: 53021
                                                     epsilon: 1.0
                                                                      steps: 248
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.53
                             memory length: 53193
                                                     epsilon: 1.0
                                                                                                    evaluation reward: 1.54
episode: 282
               score: 1.0
                                                                      steps: 172
                                                                                    lr: 0.0001
episode: 283
               score: 2.0
                             memory length: 53392
                                                     epsilon: 1.0
                                                                      steps: 199
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.55
                             memory length: 53515
               score: 0.0
episode: 284
                                                     epsilon: 1.0
                                                                      steps: 123
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.53
episode: 285
               score: 0.0
                             memory length: 53638
                                                     epsilon: 1.0
                                                                      steps: 123
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.5
episode: 286
               score: 0.0
                            memory length: 53761
                                                     epsilon: 1.0
                                                                      steps: 123
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.49
                             memory length: 54017
                                                     epsilon: 1.0
                                                                      steps: 256
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.53
episode: 287
               score: 4.0
episode: 288
               score: 0.0
                             memory length: 54140
                                                     epsilon: 1.0
                                                                      steps: 123
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.53
episode: 289
               score: 1.0
                             memory length: 54292
                                                     epsilon: 1.0
                                                                      steps: 152
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.54
episode: 290
               score: 0.0
                             memory length: 54416
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.51
                                                     epsilon: 1.0
episode: 291
               score: 8.0
                             memory length: 54829
                                                                      steps: 413
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.58
episode: 292
               score: 0.0
                             memory length: 54952
                                                     epsilon: 1.0
                                                                      steps: 123
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.55
episode: 293
               score: 2.0
                             memory length: 55133
                                                     epsilon: 1.0
                                                                      steps: 181
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.53
                             memory length: 55332
                                                     epsilon: 1.0
                                                                      steps: 199
episode: 294
               score: 2.0
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.48
episode: 295
               score: 1.0
                             memory length: 55504
                                                     epsilon: 1.0
                                                                      steps: 172
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.49
episode: 296
                                                     epsilon: 1.0
                                                                                    lr: 0.0001
               score: 4.0
                             memory length: 55803
                                                                      steps: 299
                                                                                                    evaluation reward: 1.52
episode: 297
               score: 4.0
                             memory length: 56118
                                                     epsilon: 1.0
                                                                      steps: 315
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.54
episode: 298
               score: 2.0
                             memory length: 56317
                                                     epsilon: 1.0
                                                                      steps: 199
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.54
                             memory length: 56516
episode: 299
               score: 2.0
                                                     epsilon: 1.0
                                                                      steps: 199
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.55
                            memory length: 56667
episode: 300
               score: 1.0
                                                     epsilon: 1.0
                                                                      steps: 151
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.54
               score: 0.0
                             memory length: 56790
                                                     epsilon: 1.0
                                                                      steps: 123
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.54
episode: 301
episode: 302
               score: 2.0
                             memory length: 57010
                                                     epsilon: 1.0
                                                                      steps: 220
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.55
episode: 303
               score: 3.0
                             memory length: 57280
                                                     epsilon: 1.0
                                                                      steps: 270
                                                                                    1r: 0.0001
                                                                                                    evaluation reward: 1.57
episode: 304
               score: 3.0
                             memory length: 57492
                                                     epsilon: 1.0
                                                                      steps: 212
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.59
episode: 305
               score: 0.0
                             memory length: 57616
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.56
               score: 0.0
                             memory length: 57740
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.54
episode: 306
episode: 307
               score: 1.0
                             memory length: 57892
                                                     epsilon: 1.0
                                                                      steps: 152
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.54
                                                                      steps: 123
episode: 308
               score: 0.0
                             memory length: 58015
                                                     epsilon: 1.0
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.53
episode: 309
               score: 3.0
                             memory length: 58267
                                                     epsilon: 1.0
                                                                      steps: 252
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.55
                             memory length: 58437
episode: 310
                                                     epsilon: 1.0
                                                                      steps: 170
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.55
               score: 1.0
episode: 311
               score: 3.0
                             memory length: 58684
                                                     epsilon: 1.0
                                                                      steps: 247
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.55
episode: 312
               score: 1.0
                             memory length: 58853
                                                     epsilon: 1.0
                                                                      steps: 169
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.56
                             memory length: 59025
                                                     epsilon: 1.0
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.55
episode: 313
               score: 1.0
                                                                      steps: 172
episode: 314
               score: 4.0
                             memory length: 59305
                                                     epsilon: 1.0
                                                                      steps: 280
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.58
                             memory length: 59504
episode: 315
               score: 2.0
                                                     epsilon: 1.0
                                                                      steps: 199
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.59
                             memory length: 59677
episode: 316
               score: 1.0
                                                     epsilon: 1.0
                                                                      steps: 173
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.6
episode: 317
               score: 1.0
                             memory length: 59829
                                                     epsilon: 1.0
                                                                      steps: 152
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.61
                             memory length: 60077
                                                     epsilon: 1.0
                                                                      steps: 248
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.61
episode: 318
               score: 3.0
episode: 319
               score: 0.0
                             memory length: 60201
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.6
episode: 320
               score: 4.0
                             memory length: 60501
                                                     epsilon: 1.0
                                                                      steps: 300
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.59
episode: 321
               score: 1.0
                             memory length: 60673
                                                     epsilon: 1.0
                                                                      steps: 172
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.6
episode: 322
               score: 3.0
                             memory length: 60920
                                                     epsilon: 1.0
                                                                      steps: 247
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.62
episode: 323
               score: 0.0
                             memory length: 61043
                                                     epsilon: 1.0
                                                                      steps: 123
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.61
                                                                                    lr: 0.0001
episode: 324
               score: 2.0
                             memory length: 61261
                                                     epsilon: 1.0
                                                                      steps: 218
                                                                                                    evaluation reward: 1.62
episode: 325
               score: 2.0
                             memory length: 61460
                                                     epsilon: 1.0
                                                                      steps: 199
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.61
episode: 326
               score: 3.0
                             memory length: 61709
                                                     epsilon: 1.0
                                                                      steps: 249
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.61
                             memory length: 61832
episode: 327
                                                     epsilon: 1.0
                                                                      steps: 123
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.6
               score: 0.0
episode: 328
               score: 2.0
                             memory length: 62031
                                                     epsilon: 1.0
                                                                      steps: 199
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.61
episode: 329
               score: 2.0
                             memory length: 62229
                                                     epsilon: 1.0
                                                                      steps: 198
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.63
                             memory length: 62353
                                                     epsilon: 1.0
episode: 330
               score: 0.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.62
episode: 331
               score: 4.0
                             memory length: 62652
                                                     epsilon: 1.0
                                                                      steps: 299
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.64
                                                                      steps: 220
               score: 2.0
                             memory length: 62872
                                                     epsilon: 1.0
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.65
episode: 332
episode: 333
               score: 0.0
                             memory length: 62996
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.65
                             memory length: 63167
                                                                                    lr: 0.0001
episode: 334
               score: 1.0
                                                     epsilon: 1.0
                                                                      steps: 171
                                                                                                    evaluation reward: 1.64
episode: 335
               score: 0.0
                             memory length: 63290
                                                     epsilon: 1.0
                                                                      steps: 123
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.63
episode: 336
               score: 0.0
                             memory length: 63413
                                                     epsilon: 1.0
                                                                      steps: 123
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.62
               score: 2.0
                             memory length: 63593
                                                     epsilon: 1.0
                                                                      steps: 180
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.64
episode: 337
               score: 4.0
                                                     epsilon: 1.0
episode: 338
                             memory length: 63876
                                                                      steps: 283
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.67
```

```
episode: 339
                             memory length: 64074
                                                     epsilon: 1.0
                                                                      steps: 198
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.68
               score: 2.0
episode: 340
               score: 0.0
                             memory length: 64197
                                                     epsilon: 1.0
                                                                      steps: 123
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.67
episode: 341
               score: 0.0
                             memory length: 64320
                                                     epsilon: 1.0
                                                                      steps: 123
                                                                                    1r: 0.0001
                                                                                                    evaluation reward: 1.67
episode: 342
               score: 0.0
                             memory length: 64444
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.67
episode: 343
               score: 2.0
                             memory length: 64662
                                                     epsilon: 1.0
                                                                      steps: 218
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.68
episode: 344
               score: 1.0
                             memory length: 64832
                                                     epsilon: 1.0
                                                                      steps: 170
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.67
episode: 345
               score: 2.0
                             memory length: 65052
                                                     epsilon: 1.0
                                                                      steps: 220
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.68
                             memory length: 65176
                                                     epsilon: 1.0
episode: 346
               score: 0.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.67
episode: 347
               score: 2.0
                             memory length: 65374
                                                     epsilon: 1.0
                                                                      steps: 198
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.69
episode: 348
                                                     epsilon: 1.0
                                                                                    lr: 0.0001
               score: 1.0
                             memory length: 65545
                                                                      steps: 171
                                                                                                    evaluation reward: 1.68
episode: 349
               score: 1.0
                             memory length: 65715
                                                     epsilon: 1.0
                                                                      steps: 170
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.67
episode: 350
               score: 2.0
                             memory length: 65913
                                                     epsilon: 1.0
                                                                      steps: 198
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.69
                             memory length: 66140
episode: 351
                                                     epsilon: 1.0
                                                                      steps: 227
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.71
               score: 3.0
episode: 352
               score: 4.0
                             memory length: 66434
                                                     epsilon: 1.0
                                                                      steps: 294
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.73
episode: 353
               score: 0.0
                             memory length: 66558
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.73
episode: 354
               score: 2.0
                             memory length: 66777
                                                     epsilon: 1.0
                                                                      steps: 219
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.75
episode: 355
               score: 0.0
                             memory length: 66900
                                                     epsilon: 1.0
                                                                      steps: 123
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.75
                                                                      steps: 198
                                                                                                    evaluation reward: 1.73
                             memory length: 67098
                                                     epsilon: 1.0
                                                                                    lr: 0.0001
episode: 356
               score: 2.0
episode: 357
               score: 3.0
                             memory length: 67343
                                                     epsilon: 1.0
                                                                      steps: 245
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.74
                                                                                    lr: 0.0001
episode: 358
               score: 2.0
                             memory length: 67524
                                                     epsilon: 1.0
                                                                      steps: 181
                                                                                                    evaluation reward: 1.73
                                                     epsilon: 1.0
episode: 359
               score: 2.0
                             memory length: 67723
                                                                      steps: 199
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.72
episode: 360
               score: 0.0
                             memory length: 67846
                                                     epsilon: 1.0
                                                                      steps: 123
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.64
episode: 361
               score: 1.0
                             memory length: 68017
                                                     epsilon: 1.0
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.65
                                                                      steps: 171
episode: 362
               score: 1.0
                             memory length: 68186
                                                     epsilon: 1.0
                                                                      steps: 169
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.62
episode: 363
               score: 0.0
                             memory length: 68310
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.6
episode: 364
               score: 0.0
                             memory length: 68433
                                                     epsilon: 1.0
                                                                      steps: 123
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.58
                                                     epsilon: 1.0
                                                                                    lr: 0.0001
episode: 365
               score: 0.0
                             memory length: 68557
                                                                      steps: 124
                                                                                                    evaluation reward: 1.57
episode: 366
               score: 3.0
                             memory length: 68823
                                                     epsilon: 1.0
                                                                      steps: 266
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.59
episode: 367
               score: 1.0
                             memory length: 68975
                                                     epsilon: 1.0
                                                                      steps: 152
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.57
                             memory length: 69205
                                                     epsilon: 1.0
                                                                                                    evaluation reward: 1.59
episode: 368
               score: 3.0
                                                                      steps: 230
                                                                                    lr: 0.0001
episode: 369
               score: 0.0
                             memory length: 69329
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.58
                             memory length: 69453
episode: 370
               score: 0.0
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.55
episode: 371
               score: 3.0
                             memory length: 69701
                                                     epsilon: 1.0
                                                                      steps: 248
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.54
episode: 372
               score: 1.0
                             memory length: 69852
                                                     epsilon: 1.0
                                                                      steps: 151
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.53
                             memory length: 70051
                                                     epsilon: 1.0
                                                                      steps: 199
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.52
episode: 373
               score: 2.0
episode: 374
               score: 2.0
                             memory length: 70252
                                                     epsilon: 1.0
                                                                      steps: 201
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.53
                             memory length: 70375
                                                     epsilon: 1.0
                                                                                    lr: 0.0001
episode: 375
               score: 0.0
                                                                      steps: 123
                                                                                                    evaluation reward: 1.51
episode: 376
               score: 2.0
                             memory length: 70595
                                                     epsilon: 1.0
                                                                      steps: 220
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.5
                                                     epsilon: 1.0
episode: 377
               score: 5.0
                             memory length: 70940
                                                                      steps: 345
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.55
               score: 7.0
episode: 378
                             memory length: 71324
                                                     epsilon: 1.0
                                                                      steps: 384
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.62
episode: 379
               score: 2.0
                             memory length: 71540
                                                     epsilon: 1.0
                                                                      steps: 216
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.64
                             memory length: 71883
                                                     epsilon: 1.0
episode: 380
               score: 5.0
                                                                      steps: 343
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.67
episode: 381
               score: 0.0
                             memory length: 72007
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.64
episode: 382
               score: 2.0
                             memory length: 72206
                                                     epsilon: 1.0
                                                                      steps: 199
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.65
episode: 383
               score: 6.0
                             memory length: 72580
                                                     epsilon: 1.0
                                                                      steps: 374
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.69
episode: 384
               score: 0.0
                             memory length: 72704
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.69
episode: 385
               score: 4.0
                             memory length: 72999
                                                     epsilon: 1.0
                                                                      steps: 295
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.73
episode: 386
               score: 0.0
                             memory length: 73123
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.73
               score: 2.0
                             memory length: 73342
                                                     epsilon: 1.0
                                                                      steps: 219
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.71
episode: 387
episode: 388
               score: 1.0
                             memory length: 73512
                                                     epsilon: 1.0
                                                                      steps: 170
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.72
                             memory length: 73788
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.75
episode: 389
               score: 4.0
                                                     epsilon: 1.0
                                                                      steps: 276
episode: 390
               score: 3.0
                             memory length: 74016
                                                     epsilon: 1.0
                                                                      steps: 228
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.78
episode: 391
               score: 3.0
                             memory length: 74227
                                                     epsilon: 1.0
                                                                      steps: 211
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.73
               score: 0.0
                             memory length: 74351
                                                     epsilon: 1.0
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.73
episode: 392
                                                                      steps: 124
episode: 393
               score: 1.0
                             memory length: 74521
                                                     epsilon: 1.0
                                                                      steps: 170
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.72
                             memory length: 74672
                                                     epsilon: 1.0
episode: 394
               score: 1.0
                                                                      steps: 151
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.71
episode: 395
               score: 1.0
                             memory length: 74823
                                                     epsilon: 1.0
                                                                      steps: 151
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.71
                                                                                    lr: 0.0001
episode: 396
               score: 2.0
                             memory length: 75024
                                                     epsilon: 1.0
                                                                      steps: 201
                                                                                                    evaluation reward: 1.69
               score: 3.0
                             memory length: 75255
                                                     epsilon: 1.0
                                                                      steps: 231
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.68
episode: 397
episode: 398
               score: 1.0
                             memory length: 75408
                                                     epsilon: 1.0
                                                                      steps: 153
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.67
                             memory length: 75659
episode: 399
                                                     epsilon: 1.0
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.68
               score: 3.0
                                                                      steps: 251
episode: 400
               score: 0.0
                             memory length: 75783
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.67
                             memory length: 76128
episode: 401
               score: 5.0
                                                     epsilon: 1.0
                                                                      steps: 345
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.72
episode: 402
               score: 2.0
                             memory length: 76345
                                                     epsilon: 1.0
                                                                      steps: 217
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.72
episode: 403
               score: 2.0
                             memory length: 76565
                                                     epsilon: 1.0
                                                                      steps: 220
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.71
episode: 404
               score: 1.0
                             memory length: 76735
                                                     epsilon: 1.0
                                                                      steps: 170
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.69
episode: 405
               score: 1.0
                             memory length: 76905
                                                     epsilon: 1.0
                                                                      steps: 170
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.7
episode: 406
               score: 4.0
                             memory length: 77180
                                                     epsilon: 1.0
                                                                      steps: 275
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.74
episode: 407
               score: 0.0
                             memory length: 77304
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.73
episode: 408
               score: 2.0
                             memory length: 77522
                                                     epsilon: 1.0
                                                                      steps: 218
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.75
                             memory length: 77646
episode: 409
               score: 0.0
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.72
episode: 410
               score: 1.0
                             memory length: 77817
                                                     epsilon: 1.0
                                                                      steps: 171
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.72
               score: 0.0
                             memory length: 77940
                                                     epsilon: 1.0
                                                                      steps: 123
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.69
episode: 411
episode: 412
               score: 1.0
                             memory length: 78113
                                                     epsilon: 1.0
                                                                      steps: 173
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.69
                             memory length: 78380
                                                     epsilon: 1.0
episode: 413
               score: 3.0
                                                                      steps: 267
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.71
episode: 414
               score: 2.0
                             memory length: 78582
                                                     epsilon: 1.0
                                                                      steps: 202
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.69
episode: 415
               score: 0.0
                             memory length: 78706
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.67
                             memory length: 78975
episode: 416
                                                     epsilon: 1.0
                                                                                    lr: 0.0001
               score: 3.0
                                                                      steps: 269
                                                                                                    evaluation reward: 1.69
episode: 417
                                                     epsilon: 1.0
               score: 0.0
                             memory length: 79099
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.68
                                                                      steps: 198
                             memory length: 79297
                                                     epsilon: 1.0
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.67
episode: 418
               score: 2.0
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.71
episode: 419
               score: 4.0
                             memory length: 79573
                                                     epsilon: 1.0
                                                                      steps: 276
episode: 420
               score: 1.0
                             memory length: 79725
                                                     epsilon: 1.0
                                                                      steps: 152
                                                                                    1r: 0.0001
                                                                                                    evaluation reward: 1.68
                                                     epsilon: 1.0
episode: 421
               score: 1.0
                             memory length: 79895
                                                                      steps: 170
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.68
episode: 422
               score: 0.0
                             memory length: 80019
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.65
enisode: 423
               score: 2 0
                             memory length: 80218
                                                     ensilon: 1 0
                                                                      stens: 199
                                                                                                    evaluation reward: 1 67
```

```
ећаттоп. т.о
chrange. 477
               DCULE. 2.0
                             memory rengen. 00210
                                                                      preho. 122
                                                                                                    evaluation lewaru. 1.07
episode: 424
               score: 0.0
                             memory length: 80342
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.65
                                                                                     lr: 0.0001
episode: 425
               score: 1.0
                             memory length: 80494
                                                     epsilon: 1.0
                                                                      steps: 152
                                                                                                    evaluation reward: 1.64
                                                     epsilon: 1.0
                                                                                     lr: 0.0001
episode: 426
               score: 1.0
                             memory length: 80666
                                                                      steps: 172
                                                                                                    evaluation reward: 1.62
episode: 427
               score: 0.0
                             memory length: 80790
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.62
episode: 428
                             memory length: 80962
                                                     epsilon: 1.0
                                                                      steps: 172
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.61
               score: 1.0
episode: 429
               score: 3.0
                             memory length: 81207
                                                     epsilon: 1.0
                                                                      steps: 245
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.62
                             memory length: 81426
episode: 430
               score: 2.0
                                                     epsilon: 1.0
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.64
                                                                      steps: 219
episode: 431
               score: 2.0
                             memory length: 81624
                                                     epsilon: 1.0
                                                                      steps: 198
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.62
                             memory length: 81747
                                                     epsilon: 1.0
episode: 432
               score: 0.0
                                                                      steps: 123
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.6
               score: 2.0
episode: 433
                             memory length: 81946
                                                     epsilon: 1.0
                                                                      steps: 199
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.62
episode: 434
                                                     epsilon: 1.0
                                                                                     lr: 0.0001
               score: 0.0
                             memory length: 82069
                                                                      steps: 123
                                                                                                    evaluation reward: 1.61
episode: 435
               score: 1.0
                             memory length: 82221
                                                     epsilon: 1.0
                                                                      steps: 152
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.62
episode: 436
               score: 0.0
                             memory length: 82345
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.62
                             memory length: 82516
episode: 437
                                                     epsilon: 1.0
                                                                      steps: 171
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.61
               score: 1.0
episode: 438
               score: 1.0
                             memory length: 82669
                                                     epsilon: 1.0
                                                                      steps: 153
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.58
episode: 439
               score: 0.0
                             memory length: 82792
                                                     epsilon: 1.0
                                                                      steps: 123
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.56
episode: 440
               score: 1.0
                             memory length: 82962
                                                     epsilon: 1.0
                                                                      steps: 170
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.57
                                                                                     lr: 0.0001
episode: 441
               score: 5.0
                             memory length: 83270
                                                     epsilon: 1.0
                                                                      steps: 308
                                                                                                    evaluation reward: 1.62
                             memory length: 83421
                                                     epsilon: 1.0
                                                                      steps: 151
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.63
episode: 442
               score: 1.0
episode: 443
               score: 1.0
                             memory length: 83593
                                                     epsilon: 1.0
                                                                      steps: 172
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.62
episode: 444
               score: 0.0
                             memory length: 83717
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                     1r: 0.0001
                                                                                                    evaluation reward: 1.61
episode: 445
               score: 0.0
                             memory length: 83841
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.59
episode: 446
               score: 2.0
                             memory length: 84060
                                                     epsilon: 1.0
                                                                      steps: 219
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.61
episode: 447
               score: 2.0
                             memory length: 84258
                                                     epsilon: 1.0
                                                                      steps: 198
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.61
                                                     epsilon: 1.0
episode: 448
               score: 0.0
                             memory length: 84381
                                                                      steps: 123
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.6
                             memory length: 84505
                                                     epsilon: 1.0
episode: 449
               score: 0.0
                                                                      steps: 124
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.59
episode: 450
               score: 3.0
                             memory length: 84776
                                                     epsilon: 1.0
                                                                      steps: 271
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.6
                             memory length: 84946
episode: 451
                                                     epsilon: 1.0
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.58
               score: 1.0
                                                                      steps: 170
episode: 452
               score: 2.0
                             memory length: 85144
                                                     epsilon: 1.0
                                                                      steps: 198
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.56
episode: 453
               score: 0.0
                             memory length: 85268
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.56
                             memory length: 85487
episode: 454
                                                     epsilon: 1.0
                                                                      steps: 219
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.56
               score: 2.0
episode: 455
               score: 4.0
                             memory length: 85763
                                                     epsilon: 1.0
                                                                      steps: 276
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.6
                             memory length: 86079
episode: 456
               score: 4.0
                                                     epsilon: 1.0
                                                                      steps: 316
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.62
episode: 457
               score: 1.0
                             memory length: 86248
                                                     epsilon: 1.0
                                                                      steps: 169
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.6
episode: 458
               score: 3.0
                             memory length: 86517
                                                     epsilon: 1.0
                                                                      steps: 269
                                                                                     1r: 0.0001
                                                                                                    evaluation reward: 1.61
episode: 459
               score: 1.0
                             memory length: 86687
                                                     epsilon: 1.0
                                                                      steps: 170
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.6
episode: 460
               score: 4.0
                             memory length: 86945
                                                     epsilon: 1.0
                                                                      steps: 258
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.64
episode: 461
               score: 0.0
                                                     epsilon: 1.0
                             memory length: 87069
                                                                      steps: 124
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.63
episode: 462
                                                     epsilon: 1.0
               score: 0.0
                             memory length: 87193
                                                                      steps: 124
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.62
                             memory length: 87509
                                                     epsilon: 1.0
episode: 463
               score: 4.0
                                                                      steps: 316
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.66
episode: 464
               score: 2.0
                             memory length: 87729
                                                     epsilon: 1.0
                                                                      steps: 220
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.68
episode: 465
               score: 3.0
                             memory length: 87977
                                                     epsilon: 1.0
                                                                      steps: 248
                                                                                     1r: 0.0001
                                                                                                    evaluation reward: 1.71
episode: 466
               score: 3.0
                             memory length: 88245
                                                     epsilon: 1.0
                                                                      steps: 268
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.71
episode: 467
               score: 0.0
                             memory length: 88369
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.7
                             memory length: 88568
episode: 468
                                                     epsilon: 1.0
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.69
               score: 2.0
                                                                      steps: 199
episode: 469
               score: 2.0
                             memory length: 88767
                                                     epsilon: 1.0
                                                                      steps: 199
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.71
episode: 470
               score: 4.0
                             memory length: 89024
                                                     epsilon: 1.0
                                                                      steps: 257
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.75
episode: 471
                             memory length: 89223
                                                     epsilon: 1.0
                                                                      steps: 199
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.74
               score: 2.0
episode: 472
               score: 1.0
                             memory length: 89396
                                                     epsilon: 1.0
                                                                      steps: 173
                                                                                     1r: 0.0001
                                                                                                    evaluation reward: 1.74
episode: 473
                             memory length: 89567
                                                     epsilon: 1.0
                                                                      steps: 171
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.73
               score: 1.0
episode: 474
               score: 0.0
                             memory length: 89690
                                                     epsilon: 1.0
                                                                      steps: 123
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.71
episode: 475
               score: 1.0
                             memory length: 89860
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.72
                                                     epsilon: 1.0
                                                                      steps: 170
episode: 476
               score: 2.0
                             memory length: 90058
                                                     epsilon: 1.0
                                                                      steps: 198
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.72
episode: 477
               score: 2.0
                             memory length: 90276
                                                     epsilon: 1.0
                                                                      steps: 218
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.69
episode: 478
               score: 0.0
                             memory length: 90399
                                                     epsilon: 1.0
                                                                      steps: 123
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.62
episode: 479
               score: 2.0
                             memory length: 90598
                                                     epsilon: 1.0
                                                                      steps: 199
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.62
                             memory length: 90721
                                                     epsilon: 1.0
episode: 480
               score: 0.0
                                                                      steps: 123
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.57
episode: 481
               score: 0.0
                             memory length: 90845
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.57
                             memory length: 90968
                                                     epsilon: 1.0
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.55
episode: 482
               score: 0.0
                                                                      steps: 123
episode: 483
               score: 2.0
                             memory length: 91167
                                                     epsilon: 1.0
                                                                      steps: 199
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.51
episode: 484
               score: 1.0
                             memory length: 91337
                                                     epsilon: 1.0
                                                                      steps: 170
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.52
episode: 485
                             memory length: 91565
                                                     epsilon: 1.0
                                                                      steps: 228
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.51
               score: 3.0
episode: 486
               score: 3.0
                             memory length: 91833
                                                     epsilon: 1.0
                                                                      steps: 268
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.54
                             memory length: 92062
episode: 487
               score: 3.0
                                                     epsilon: 1.0
                                                                      steps: 229
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.55
episode: 488
               score: 5.0
                             memory length: 92408
                                                     epsilon: 1.0
                                                                      steps: 346
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.59
episode: 489
               score: 3.0
                             memory length: 92655
                                                     epsilon: 1.0
                                                                      steps: 247
                                                                                     1r: 0.0001
                                                                                                    evaluation reward: 1.58
episode: 490
               score: 2.0
                             memory length: 92854
                                                     epsilon: 1.0
                                                                      steps: 199
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.57
episode: 491
               score: 2.0
                             memory length: 93053
                                                     epsilon: 1.0
                                                                      steps: 199
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.56
episode: 492
                             memory length: 93177
                                                     epsilon: 1.0
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.56
               score: 0.0
                                                                      steps: 124
episode: 493
               score: 0.0
                             memory length: 93300
                                                     epsilon: 1.0
                                                                      steps: 123
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.55
episode: 494
               score: 4.0
                             memory length: 93595
                                                     epsilon: 1.0
                                                                      steps: 295
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.58
episode: 495
               score: 0.0
                             memory length: 93718
                                                     epsilon: 1.0
                                                                      steps: 123
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.57
episode: 496
                                                     epsilon: 1.0
               score: 2.0
                             memory length: 93916
                                                                      steps: 198
                                                                                    1r: 0.0001
                                                                                                    evaluation reward: 1.57
episode: 497
               score: 4.0
                             memory length: 94181
                                                     epsilon: 1.0
                                                                      steps: 265
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.58
               score: 2.0
episode: 498
                             memory length: 94380
                                                     epsilon: 1.0
                                                                      steps: 199
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.59
                             memory length: 94532
                                                                                                    evaluation reward: 1.57
episode: 499
               score: 1.0
                                                     epsilon: 1.0
                                                                      steps: 152
                                                                                     lr: 0.0001
episode: 500
               score: 2.0
                             memory length: 94731
                                                     epsilon: 1.0
                                                                      steps: 199
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.59
episode: 501
               score: 0.0
                             memory length: 94854
                                                     epsilon: 1.0
                                                                      steps: 123
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.54
                             memory length: 94978
episode: 502
               score: 0.0
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.52
episode: 503
               score: 0.0
                             memory length: 95102
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.5
               score: 5.0
                             memory length: 95431
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.54
episode: 504
                                                     epsilon: 1.0
                                                                      steps: 329
episode: 505
               score: 0.0
                             memory length: 95554
                                                     epsilon: 1.0
                                                                      steps: 123
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.53
episode: 506
               score: 4.0
                             memory length: 95824
                                                     epsilon: 1.0
                                                                      steps: 270
                                                                                     1r: 0.0001
                                                                                                    evaluation reward: 1.53
episode: 507
               score: 3.0
                             memory length: 96052
                                                     epsilon: 1.0
                                                                      steps: 228
                                                                                     lr: 0.0001
                                                                                                    evaluation reward: 1.56
```

```
score: 3.0
                             memory length: 96279
                                                     epsilon: 1.0
                                                                     steps: 227
                                                                                    Ir: 0.0001
                                                                                                    evaluation reward: 1.57
episode: 508
                                                                                    lr: 0.0001
episode: 509
               score: 3.0
                             memory length: 96505
                                                     epsilon: 1.0
                                                                      steps: 226
                                                                                                    evaluation reward: 1.6
episode: 510
               score: 2.0
                             memory length: 96704
                                                     epsilon: 1.0
                                                                      steps: 199
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.61
                             memory length: 96828
                                                                      steps: 124
episode: 511
               score: 0.0
                                                     epsilon: 1.0
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.61
episode: 512
               score: 0.0
                             memory length: 96952
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.6
                                                     epsilon: 1.0
                             memory length: 97103
                                                                                    lr: 0.0001
episode: 513
               score: 1.0
                                                                      steps: 151
                                                                                                    evaluation reward: 1.58
episode: 514
               score: 2.0
                             memory length: 97322
                                                     epsilon: 1.0
                                                                      steps: 219
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.58
episode: 515
               score: 0.0
                             memory length: 97445
                                                     epsilon: 1.0
                                                                      steps: 123
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.58
                             memory length: 97692
                                                                                                    evaluation reward: 1.58
episode: 516
               score: 3.0
                                                     epsilon: 1.0
                                                                      steps: 247
                                                                                    lr: 0.0001
episode: 517
               score: 1.0
                             memory length: 97861
                                                     epsilon: 1.0
                                                                      steps: 169
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.59
episode: 518
               score: 3.0
                             memory length: 98130
                                                     epsilon: 1.0
                                                                      steps: 269
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.6
episode: 519
               score: 2.0
                             memory length: 98329
                                                     epsilon: 1.0
                                                                      steps: 199
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.58
episode: 520
               score: 0.0
                             memory length: 98452
                                                     epsilon: 1.0
                                                                      steps: 123
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.57
episode: 521
               score: 0.0
                             memory length: 98576
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.56
episode: 522
               score: 2.0
                             memory length: 98774
                                                     epsilon: 1.0
                                                                      steps: 198
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.58
episode: 523
                             memory length: 98943
                                                     epsilon: 1.0
                                                                      steps: 169
               score: 1.0
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.57
episode: 524
               score: 0.0
                             memory length: 99067
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.57
episode: 525
               score: 0.0
                             memory length: 99191
                                                     epsilon: 1.0
                                                                      steps: 124
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.56
                                                                                    lr: 0.0001
episode: 526
               score: 1.0
                             memory length: 99360
                                                     epsilon: 1.0
                                                                      steps: 169
                                                                                                    evaluation reward: 1.56
episode: 527
               score: 3.0
                             memory length: 99570
                                                     epsilon: 1.0
                                                                      steps: 210
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.59
                             memory length: 99769
                                                                                                    evaluation reward: 1.6
episode: 528
               score: 2.0
                                                     epsilon: 1.0
                                                                      steps: 199
                                                                                    lr: 0.0001
               score: 2.0
episode: 529
                             memory length: 99988
                                                     epsilon: 1.0
                                                                      steps: 219
                                                                                    lr: 0.0001
                                                                                                    evaluation reward: 1.59
/content/gdrive/.shortcut-targets-by-id/1CyoDj2SP_pATjHE1VctJ3S5_2D-1_IHK/assignment5_materials/memory.py:38: VisibleDep.
```

sample = np.array(sample)
/content/gdrive/.shortcut-targets-by-id/1CyoDj2SP\_pATjHElVctJ3S5\_2D-1\_IHK/assignment5\_materials/memory.py:38: FutureWarn
sample = np.array(sample)

/content/gdrive/.shortcut-targets-by-id/1CyoDj2SP\_pATjHElVctJ3S5\_2D-1\_IHK/assignment5\_materials/agent\_double.py:77: Visi mini\_batch = np.array(mini\_batch).transpose()

/content/gdrive/.shortcut-targets-by-id/1CyoDj2SP\_pATjHElVctJ3S5\_2D-1\_IHK/assignment5\_materials/agent\_double.py:96: User
next\_states\_value[mask] = self.target\_net(next\_states[mask]).max(1)[0].detach()

/usr/local/lib/python3.10/dist-packages/torch/optim/lr\_scheduler.py:139: UserWarning: Detected call of `lr\_scheduler.step warnings.warn("Detected call of `lr\_scheduler.step()` before `optimizer.step()`. "

/content/gdrive/.shortcut-targets-by-id/1CyoDj2SP\_pATjHElVctJ3S5\_2D-1\_IHK/assignment5\_materials/agent\_double.py:77: Futu mini batch = np.array(mini batch).transpose() memory length: 100157 epsilon: 0.9996871600000068 lr: 0.0001 episode: 530 score: 1.0 steps: 169 evaluation episode: 531 score: 2.0 memory length: 100375 epsilon: 0.9992555200000162 lr: 0.0001 steps: 218 evaluation episode: 532 score: 4.0 epsilon: 0.9987050800000281 memory length: 100653 steps: 278 1r: 0.0001 evaluation episode: 533 score: 1.0 memory length: 100822 epsilon: 0.9983704600000354 lr: 0.0001 evaluati steps: 169 episode: 534 score: 2.0 memory length: 101021 epsilon: 0.9979764400000439 steps: 199 lr: 0.0001 evaluation episode: 535 score: 0.0 memory length: 101145 epsilon: 0.9977309200000493 lr: 0.0001 steps: 124 evaluation epsilon: 0.9973685800000571 episode: 536 score: 2.0 memory length: 101328 steps: 183 lr: 0.0001 evaluation episode: 537 score: 0.0 memory length: 101451 epsilon: 0.9971250400000624 steps: 123 lr: 0.0001 evaluation episode: 538 score: 0.0 memory length: 101575 epsilon: 0.9968795200000677 lr: 0.0001 steps: 124 evaluatio epsilon: 0.9965389600000751 episode: 539 score: 1.0 memory length: 101747 steps: 172 1r: 0.0001 evaluation epsilon: 0.9962023600000824 episode: 540 score: 1.0 memory length: 101917 steps: 170 lr: 0.0001 evaluati epsilon: 0.9958637800000898 episode: 541 score: 1.0 memory length: 102088 steps: 171 lr: 0.0001 evaluati memory length: 102211 episode: 542 epsilon: 0.9956202400000951 lr: 0.0001 evaluatio score: 0.0 steps: 123 episode: 543 score: 5.0 memory length: 102527 epsilon: 0.9949945600001087 steps: 316 lr: 0.0001 evaluation episode: 544 score: 3.0 memory length: 102776 epsilon: 0.9945015400001194 steps: 249 lr: 0.0001 evaluati episode: 545 score: 3.0 memory length: 103004 epsilon: 0.9940501000001292 steps: 228 lr: 0.0001 evaluati episode: 546 score: 5.0 memory length: 103315 epsilon: 0.9934343200001425 steps: 311 1r: 0.0001 evaluation episode: 547 memory length: 103467 epsilon: 0.9931333600001491 steps: 152 lr: 0.0001 score: 1.0 evaluation episode: 548 score: 2.0 memory length: 103666 epsilon: 0.9927393400001576 steps: 199 lr: 0.0001 evaluati episode: 549 score: 2.0 memory length: 103869 epsilon: 0.9923374000001663 steps: 203 1r: 0.0001 evaluation episode: 550 score: 3.0 memory length: 104118 epsilon: 0.991844380000177 steps: 249 lr: 0.0001 evaluatio: episode: 551 score: 1.0 memory length: 104288 epsilon: 0.9915077800001844 steps: 170 lr: 0.0001 evaluation episode: 552 memory length: 104440 epsilon: 0.9912068200001909 lr: 0.0001 score: 1.0 steps: 152 evaluatio epsilon: 0.9909632800001962 episode: 553 score: 0.0 memory length: 104563 steps: 123 lr: 0.0001 evaluation episode: 554 score: 0.0 memory length: 104687 epsilon: 0.9907177600002015 steps: 124 lr: 0.0001 evaluation steps: 222 lr: 0.0001 episode: 555 score: 2.0 memory length: 104909 epsilon: 0.990278200000211 evaluatio: lr: 0.0001 episode: 556 score: 2.0 memory length: 105127 epsilon: 0.9898465600002204 steps: 218 evaluation episode: 557 score: 0.0 memory length: 105251 epsilon: 0.9896010400002258 steps: 124 lr: 0.0001 evaluati episode: 558 score: 1.0 memory length: 105403 epsilon: 0.9893000800002323 steps: 152 lr: 0.0001 evaluati episode: 559 score: 2.0 memory length: 105602 epsilon: 0.9889060600002408 steps: 199 lr: 0.0001 evaluatio episode: 560 score: 4.0 memory length: 105881 epsilon: 0.9883536400002528 steps: 279 lr: 0.0001 evaluation episode: 561 score: 4.0 memory length: 106179 epsilon: 0.9877636000002656 steps: 298 lr: 0.0001 evaluation score: 0.0 episode: 562 memory length: 106303 epsilon: 0.987518080000271 steps: 124 lr: 0.0001 evaluatio: episode: 563 epsilon: 0.9872745400002763 score: 0.0 memory length: 106426 steps: 123 1r: 0.0001 evaluation episode: 564 memory length: 106596 epsilon: 0.9869379400002836 steps: 170 lr: 0.0001 score: 1.0 evaluation episode: 565 score: 0.0 memory length: 106719 epsilon: 0.9866944000002889 steps: 123 lr: 0.0001 evaluation score: 1.0 memory length: 106871 epsilon: 0.9863934400002954 lr: 0.0001 episode: 566 steps: 152 evaluatio epsilon: 0.9860509000003028 episode: 567 score: 1.0 memory length: 107044 steps: 173 lr: 0.0001 evaluation episode: 568 score: 1.0 memory length: 107215 epsilon: 0.9857123200003102 steps: 171 lr: 0.0001 evaluation episode: 569 score: 1.0 memory length: 107385 epsilon: 0.9853757200003175 steps: 170 lr: 0.0001 evaluatio episode: 570 score: 1.0 memory length: 107536 epsilon: 0.985076740000324 steps: 151 lr: 0.0001 evaluation epsilon: 0.9847757800003305 episode: 571 score: 1.0 memory length: 107688 steps: 152 lr: 0.0001 evaluati episode: 572 score: 1.0 memory length: 107857 epsilon: 0.9844411600003378 steps: 169 lr: 0.0001 evaluation memory length: 108026 episode: 573 epsilon: 0.984106540000345 steps: 169 lr: 0.0001 evaluation score: 1.0 score: 4.0 epsilon: 0.9835580800003569 episode: 574 memory length: 108303 steps: 277 lr: 0.0001 evaluation episode: 575 score: 3.0 memory length: 108548 epsilon: 0.9830729800003675 steps: 245 lr: 0.0001 evaluati episode: 576 score: 3.0 memory length: 108818 epsilon: 0.9825383800003791 steps: 270 lr: 0.0001 evaluati episode: 577 score: 0.0 memory length: 108942 epsilon: 0.9822928600003844 steps: 124 lr: 0.0001 evaluation episode: 578 score: 1.0 memory length: 109112 epsilon: 0.9819562600003917 steps: 170 lr: 0.0001 evaluation episode: 579 score: 0.0 memory length: 109236 epsilon: 0.981710740000397 steps: 124 lr: 0.0001 evaluatio: episode: 580 score: 0.0 memory length: 109360 epsilon: 0.9814652200004024 steps: 124 lr: 0.0001 evaluation

```
epsilon: 0.9812216800004077
episode: 581
               score: 0.0
                             memory length: 109483
                                                                                       steps: 123
                                                                                                      lr: 0.0001
                                                                                                                      evaluati
                                                      epsilon: 0.980976160000413
episode: 582
               score: 0.0
                             memory length: 109607
                                                                                      steps: 124
                                                                                                     lr: 0.0001
                                                                                                                     evaluation
episode: 583
                             memory length: 109776
                                                      epsilon: 0.9806415400004203
                                                                                       steps: 169
                                                                                                      lr: 0.0001
                                                                                                                      evaluatio
               score: 1.0
episode: 584
               score: 3.0
                             memory length: 110024
                                                      epsilon: 0.9801505000004309
                                                                                       steps: 248
                                                                                                      lr: 0.0001
                                                                                                                      evaluation
                                                                                       steps: 169
                             memory length: 110193
                                                      epsilon: 0.9798158800004382
                                                                                                      lr: 0.0001
                                                                                                                      evaluati
episode: 585
               score: 1.0
episode: 586
               score: 3.0
                             memory length: 110439
                                                      epsilon: 0.9793288000004488
                                                                                       steps: 246
                                                                                                      lr: 0.0001
                                                                                                                      evaluati
episode: 587
               score: 0.0
                             memory length: 110563
                                                      epsilon: 0.9790832800004541
                                                                                                      lr: 0.0001
                                                                                                                      evaluatio
                                                                                       steps: 124
episode: 588
               score: 2.0
                             memory length: 110764
                                                      epsilon: 0.9786853000004627
                                                                                       steps: 201
                                                                                                      lr: 0.0001
                                                                                                                      evaluatio
episode: 589
               score: 3.0
                             memory length: 111011
                                                      epsilon: 0.9781962400004733
                                                                                       steps: 247
                                                                                                      lr: 0.0001
                                                                                                                      evaluati
episode: 590
               score: 4.0
                             memory length: 111311
                                                      epsilon: 0.9776022400004862
                                                                                                      lr: 0.0001
                                                                                       steps: 300
                                                                                                                      evaluati
episode: 591
               score: 3.0
                             memory length: 111541
                                                      epsilon: 0.9771468400004961
                                                                                       steps: 230
                                                                                                      lr: 0.0001
                                                                                                                      evaluation
episode: 592
               score: 0.0
                             memory length: 111665
                                                      epsilon: 0.9769013200005014
                                                                                       steps: 124
                                                                                                      lr: 0.0001
                                                                                                                      evaluati
episode: 593
               score: 1.0
                             memory length: 111817
                                                      epsilon: 0.976600360000508
                                                                                      steps: 152
                                                                                                     lr: 0.0001
                                                                                                                     evaluatio:
                             memory length: 112039
episode: 594
                                                      epsilon: 0.9761608000005175
                                                                                                      1r: 0.0001
               score: 2.0
                                                                                       steps: 222
                                                                                                                      evaluation
episode: 595
               score: 2.0
                             memory length: 112237
                                                      epsilon: 0.975768760000526
                                                                                      steps: 198
                                                                                                     lr: 0.0001
                                                                                                                     evaluatio
episode: 596
               score: 2.0
                             memory length: 112456
                                                      epsilon: 0.9753351400005354
                                                                                       steps: 219
                                                                                                      lr: 0.0001
                                                                                                                      evaluati
episode: 597
                             memory length: 112729
                                                      epsilon: 0.9747946000005472
                                                                                                      lr: 0.0001
                                                                                                                      evaluatio
               score: 3.0
                                                                                       steps: 273
episode: 598
               score: 2.0
                             memory length: 112928
                                                      epsilon: 0.9744005800005557
                                                                                       steps: 199
                                                                                                      lr: 0.0001
                                                                                                                      evaluation
episode: 599
               score: 2.0
                             memory length: 113127
                                                      epsilon: 0.9740065600005643
                                                                                       steps: 199
                                                                                                      lr: 0.0001
                                                                                                                      evaluation
               score: 0.0
                                                                                                                      evaluati
episode: 600
                             memory length: 113251
                                                      epsilon: 0.9737610400005696
                                                                                       steps: 124
                                                                                                      lr: 0.0001
                             memory length: 113495
episode: 601
               score: 3.0
                                                      epsilon: 0.9732779200005801
                                                                                       steps: 244
                                                                                                      lr: 0.0001
                                                                                                                      evaluation
episode: 602
               score: 0.0
                             memory length: 113619
                                                      epsilon: 0.9730324000005854
                                                                                       steps: 124
                                                                                                      lr: 0.0001
                                                                                                                      evaluati
episode: 603
               score: 4.0
                             memory length: 113916
                                                      epsilon: 0.9724443400005982
                                                                                       steps: 297
                                                                                                      lr: 0.0001
                                                                                                                      evaluati
               score: 0.0
                             memory length: 114039
                                                      epsilon: 0.9722008000006035
                                                                                       steps: 123
                                                                                                      lr: 0.0001
                                                                                                                      evaluati
episode: 604
episode: 605
               score: 1.0
                             memory length: 114208
                                                      epsilon: 0.9718661800006108
                                                                                       steps: 169
                                                                                                      lr: 0.0001
                                                                                                                      evaluatio
                             memory length: 114332
episode: 606
               score: 0.0
                                                      epsilon: 0.9716206600006161
                                                                                       steps: 124
                                                                                                      lr: 0.0001
                                                                                                                      evaluation
               score: 0.0
episode: 607
                             memory length: 114455
                                                      epsilon: 0.9713771200006214
                                                                                       steps: 123
                                                                                                      lr: 0.0001
                                                                                                                      evaluati
episode: 608
               score: 1.0
                             memory length: 114606
                                                      epsilon: 0.9710781400006279
                                                                                       steps: 151
                                                                                                      lr: 0.0001
                                                                                                                      evaluation
               score: 4.0
                             memory length: 114923
                                                      epsilon: 0.9704504800006415
                                                                                       steps: 317
                                                                                                      lr: 0.0001
episode: 609
                                                                                                                      evaluation
               score: 2.0
                             memory length: 115141
                                                      epsilon: 0.9700188400006509
                                                                                                      lr: 0.0001
episode: 610
                                                                                       steps: 218
                                                                                                                      evaluation
episode: 611
                             memory length: 115292
                                                      epsilon: 0.9697198600006574
                                                                                       steps: 151
                                                                                                      lr: 0.0001
                                                                                                                      evaluatio
               score: 1.0
                             memory length: 115491
episode: 612
               score: 2.0
                                                      epsilon: 0.9693258400006659
                                                                                       steps: 199
                                                                                                      lr: 0.0001
                                                                                                                      evaluation
episode: 613
               score: 2.0
                             memory length: 115690
                                                      epsilon: 0.9689318200006745
                                                                                       steps: 199
                                                                                                      lr: 0.0001
                                                                                                                      evaluati
episode: 614
               score: 3.0
                             memory length: 115919
                                                      epsilon: 0.9684784000006843
                                                                                       steps: 229
                                                                                                      lr: 0.0001
                                                                                                                      evaluatio
episode: 615
               score: 0.0
                             memory length: 116043
                                                      epsilon: 0.9682328800006896
                                                                                       steps: 124
                                                                                                      lr: 0.0001
                                                                                                                      evaluation
               score: 3.0
                             memory length: 116272
                                                      epsilon: 0.9677794600006995
                                                                                                      lr: 0.0001
episode: 616
                                                                                       steps: 229
                                                                                                                      evaluation
episode: 617
               score: 1.0
                             memory length: 116424
                                                      epsilon: 0.967478500000706
                                                                                      steps: 152
                                                                                                     lr: 0.0001
                                                                                                                     evaluatio:
               score: 0.0
                             memory length: 116548
                                                      epsilon: 0.9672329800007113
                                                                                                      lr: 0.0001
                                                                                                                      evaluatio
episode: 618
                                                                                       steps: 124
episode: 619
               score: 1.0
                             memory length: 116718
                                                      epsilon: 0.9668963800007186
                                                                                       steps: 170
                                                                                                      lr: 0.0001
                                                                                                                      evaluatio
episode: 620
               score: 4.0
                             memory length: 116995
                                                      epsilon: 0.9663479200007306
                                                                                       steps: 277
                                                                                                      lr: 0.0001
                                                                                                                      evaluation
episode: 621
               score: 2.0
                             memory length: 117215
                                                      epsilon: 0.96591232000074
                                                                                     steps: 220
                                                                                                    lr: 0.0001
                                                                                                                    evaluation
episode: 622
               score: 1.0
                             memory length: 117388
                                                      epsilon: 0.9655697800007474
                                                                                       steps: 173
                                                                                                      lr: 0.0001
                                                                                                                      evaluation
                             memory length: 117606
                                                      epsilon: 0.9651381400007568
episode: 623
               score: 2.0
                                                                                       steps: 218
                                                                                                      lr: 0.0001
                                                                                                                      evaluation
               score: 2.0
                             memory length: 117826
                                                      epsilon: 0.9647025400007663
                                                                                                      lr: 0.0001
episode: 624
                                                                                       steps: 220
                                                                                                                      evaluatio
episode: 625
                                                      epsilon: 0.9643619800007737
               score: 1.0
                             memory length: 117998
                                                                                       steps: 172
                                                                                                      1r: 0.0001
                                                                                                                      evaluation
episode: 626
               score: 0.0
                             memory length: 118121
                                                      epsilon: 0.964118440000779
                                                                                      steps: 123
                                                                                                     lr: 0.0001
                                                                                                                     evaluatio
episode: 627
               score: 0.0
                             memory length: 118245
                                                      epsilon: 0.9638729200007843
                                                                                       steps: 124
                                                                                                      lr: 0.0001
                                                                                                                      evaluati
episode: 628
               score: 2.0
                             memory length: 118429
                                                      epsilon: 0.9635086000007922
                                                                                                      lr: 0.0001
                                                                                                                      evaluatio
                                                                                       steps: 184
episode: 629
               score: 2.0
                             memory length: 118628
                                                      epsilon: 0.9631145800008007
                                                                                       steps: 199
                                                                                                      lr: 0.0001
                                                                                                                      evaluation
episode: 630
               score: 1.0
                             memory length: 118798
                                                      epsilon: 0.962777980000808
                                                                                      steps: 170
                                                                                                     lr: 0.0001
                                                                                                                     evaluation
               score: 4.0
episode: 631
                             memory length: 119041
                                                      epsilon: 0.9622968400008185
                                                                                       steps: 243
                                                                                                      lr: 0.0001
                                                                                                                      evaluati
               score: 0.0
                                                      epsilon: 0.9620533000008238
                                                                                                      lr: 0.0001
episode: 632
                             memory length: 119164
                                                                                       steps: 123
                                                                                                                      evaluation
episode: 633
               score: 0.0
                             memory length: 119288
                                                      epsilon: 0.9618077800008291
                                                                                       steps: 124
                                                                                                      lr: 0.0001
                                                                                                                      evaluati
episode: 634
               score: 2.0
                             memory length: 119489
                                                      epsilon: 0.9614098000008378
                                                                                       steps: 201
                                                                                                      lr: 0.0001
                                                                                                                      evaluati
               score: 2.0
                             memory length: 119672
                                                      ensilon: 0.9610474600008456
                                                                                                      1r: 0.0001
episode: 635
                                                                                       steps: 183
                                                                                                                      evaluation
episode: 636
               score: 2.0
                             memory length: 119870
                                                      epsilon: 0.9606554200008541
                                                                                       steps: 198
                                                                                                      lr: 0.0001
                                                                                                                      evaluation
episode: 637
               score: 0.0
                             memory length: 119994
                                                      epsilon: 0.9604099000008595
                                                                                       steps: 124
                                                                                                      lr: 0.0001
                                                                                                                      evaluation
episode: 638
               score: 8.0
                             memory length: 120325
                                                      epsilon: 0.9597545200008737
                                                                                                      lr: 0.0001
                                                                                                                      evaluatio
                                                                                       steps: 331
episode: 639
               score: 2.0
                             memory length: 120545
                                                      epsilon: 0.9593189200008831
                                                                                       steps: 220
                                                                                                      1r: 0.0001
                                                                                                                      evaluation
               score: 4.0
                             memory length: 120822
                                                      epsilon: 0.958770460000895
                                                                                                     lr: 0.0001
                                                                                                                     evaluatio:
episode: 640
                                                                                      steps: 277
               score: 3.0
                             memory length: 121052
                                                      epsilon: 0.9583150600009049
                                                                                                      lr: 0.0001
episode: 641
                                                                                       steps: 230
                                                                                                                      evaluation
episode: 642
               score: 2.0
                             memory length: 121250
                                                      epsilon: 0.9579230200009134
                                                                                       steps: 198
                                                                                                      lr: 0.0001
                                                                                                                      evaluatio
                                                      epsilon: 0.9575864200009208
episode: 643
               score: 1.0
                             memory length: 121420
                                                                                       steps: 170
                                                                                                      lr: 0.0001
                                                                                                                      evaluation
episode: 644
               score: 5.0
                             memory length: 121746
                                                      epsilon: 0.9569409400009348
                                                                                       steps: 326
                                                                                                      lr: 0.0001
                                                                                                                      evaluati
episode: 645
                             memory length: 121919
                                                      epsilon: 0.9565984000009422
                                                                                       steps: 173
                                                                                                      lr: 0.0001
                                                                                                                      evaluatio
               score: 1.0
episode: 646
               score: 1.0
                             memory length: 122089
                                                      epsilon: 0.9562618000009495
                                                                                       steps: 170
                                                                                                      lr: 0.0001
                                                                                                                      evaluation
                                                                                       steps: 124
episode: 647
                             memory length: 122213
                                                      epsilon: 0.9560162800009548
                                                                                                      lr: 0.0001
                                                                                                                      evaluati
               score: 0.0
episode: 648
               score: 0.0
                             memory length: 122337
                                                      epsilon: 0.9557707600009602
                                                                                       steps: 124
                                                                                                      lr: 0.0001
                                                                                                                      evaluati
               score: 7.0
                                                      epsilon: 0.9551728000009732
episode: 649
                             memory length: 122639
                                                                                       steps: 302
                                                                                                      1r: 0.0001
                                                                                                                      evaluation
               score: 3.0
episode: 650
                             memory length: 122888
                                                      epsilon: 0.9546797800009839
                                                                                       steps: 249
                                                                                                      lr: 0.0001
                                                                                                                      evaluatio
episode: 651
               score: 2.0
                             memory length: 123110
                                                      epsilon: 0.9542402200009934
                                                                                       steps: 222
                                                                                                      lr: 0.0001
                                                                                                                      evaluation
episode: 652
               score: 0.0
                             memory length: 123234
                                                      epsilon: 0.9539947000009987
                                                                                       steps: 124
                                                                                                      lr: 0.0001
                                                                                                                      evaluatio
episode: 653
               score: 1.0
                             memory length: 123386
                                                      epsilon: 0.9536937400010053
                                                                                       steps: 152
                                                                                                      lr: 0.0001
                                                                                                                      evaluation
                             memory length: 123637
                                                                                                     lr: 0.0001
episode: 654
               score: 3.0
                                                      epsilon: 0.953196760001016
                                                                                      steps: 251
                                                                                                                     evaluation
episode: 655
               score: 2.0
                             memory length: 123836
                                                      epsilon: 0.9528027400010246
                                                                                       steps: 199
                                                                                                      lr: 0.0001
                                                                                                                      evaluation
                                                      epsilon: 0.9525037600010311
                                                                                                      1r: 0.0001
episode: 656
               score: 1.0
                             memory length: 123987
                                                                                       steps: 151
                                                                                                                      evaluation
                             memory length: 124236
episode: 657
               score: 3.0
                                                      epsilon: 0.9520107400010418
                                                                                       steps: 249
                                                                                                      lr: 0.0001
                                                                                                                      evaluati
episode: 658
               score: 1.0
                             memory length: 124409
                                                      epsilon: 0.9516682000010492
                                                                                       steps: 173
                                                                                                      lr: 0.0001
                                                                                                                      evaluati
                                                                                                      lr: 0.0001
                                                                                                                      evaluatio
episode: 659
               score: 2.0
                             memory length: 124626
                                                      epsilon: 0.9512385400010586
                                                                                       steps: 217
episode: 660
               score: 1.0
                             memory length: 124797
                                                      epsilon: 0.9508999600010659
                                                                                       steps: 171
                                                                                                      lr: 0.0001
                                                                                                                      evaluation
episode: 661
               score: 2.0
                             memory length: 125016
                                                      epsilon: 0.9504663400010753
                                                                                       steps: 219
                                                                                                      lr: 0.0001
                                                                                                                      evaluation
episode: 662
               score: 1.0
                             memory length: 125186
                                                      epsilon: 0.9501297400010826
                                                                                       steps: 170
                                                                                                      lr: 0.0001
                                                                                                                      evaluati
episode: 663
                                                      epsilon: 0.9498248200010893
               score: 1.0
                             memory length: 125340
                                                                                       steps: 154
                                                                                                      lr: 0.0001
                                                                                                                      evaluation
                             memory length: 125464
                                                      epsilon: 0.9495793000010946
                                                                                                      lr: 0.0001
episode: 664
               score: 0.0
                                                                                        steps: 124
                                                                                                                      evaluation
episode: 665
               score: 1.0
                             memory length: 125615
                                                      epsilon: 0.9492803200011011
                                                                                       steps: 151
                                                                                                      lr: 0.0001
                                                                                                                      evaluation
```

```
episode: 666
               score: 2.0
                             memory length: 125837
                                                      epsilon: 0.9488407600011106
                                                                                       steps: 222
                                                                                                      lr: 0.0001
                                                                                                                      evaluatio
                                                      epsilon: 0.948318040001122
episode: 667
               score: 3.0
                             memory length: 126101
                                                                                      steps: 264
                                                                                                     lr: 0.0001
                                                                                                                     evaluatio:
                             memory length: 126224
                                                      epsilon: 0.9480745000011273
episode: 668
               score: 0.0
                                                                                       steps: 123
                                                                                                      lr: 0.0001
                                                                                                                      evaluation
episode: 669
               score: 4.0
                             memory length: 126521
                                                      epsilon: 0.94748644000114
                                                                                     steps: 297
                                                                                                    lr: 0.0001
                                                                                                                    evaluation
                                                                                                      lr: 0.0001
episode: 670
               score: 1.0
                             memory length: 126673
                                                      epsilon: 0.9471854800011466
                                                                                       steps: 152
                                                                                                                      evaluation
episode: 671
               score: 1.0
                             memory length: 126825
                                                      epsilon: 0.9468845200011531
                                                                                       steps: 152
                                                                                                      lr: 0.0001
                                                                                                                      evaluatio
episode: 672
               score: 2.0
                             memory length: 127044
                                                      epsilon: 0.9464509000011625
                                                                                       steps: 219
                                                                                                      lr: 0.0001
                                                                                                                      evaluati
               score: 2.0
                             memory length: 127245
                                                                                                      lr: 0.0001
episode: 673
                                                      epsilon: 0.9460529200011711
                                                                                       steps: 201
                                                                                                                      evaluatio
episode: 674
               score: 0.0
                             memory length: 127368
                                                      epsilon: 0.9458093800011764
                                                                                       steps: 123
                                                                                                      lr: 0.0001
                                                                                                                      evaluatio
episode: 675
               score: 2.0
                             memory length: 127566
                                                      epsilon: 0.9454173400011849
                                                                                       steps: 198
                                                                                                      lr: 0.0001
                                                                                                                      evaluati
episode: 676
               score: 1.0
                             memory length: 127735
                                                      epsilon: 0.9450827200011922
                                                                                       steps: 169
                                                                                                      lr: 0.0001
                                                                                                                      evaluati
episode: 677
                                                                                                      1r: 0.0001
               score: 1.0
                             memory length: 127905
                                                      epsilon: 0.9447461200011995
                                                                                       steps: 170
                                                                                                                      evaluation
               score: 3.0
                             memory length: 128152
                                                      epsilon: 0.9442570600012101
                                                                                                      lr: 0.0001
                                                                                                                      evaluati
episode: 678
                                                                                       steps: 247
episode: 679
               score: 2.0
                             memory length: 128353
                                                      epsilon: 0.9438590800012188
                                                                                       steps: 201
                                                                                                      lr: 0.0001
                                                                                                                      evaluati
                             memory length: 128505
                                                                                       steps: 152
episode: 680
                                                      epsilon: 0.9435581200012253
                                                                                                      1r: 0.0001
                                                                                                                      evaluatio
               score: 1.0
                             memory length: 128758
episode: 681
               score: 3.0
                                                      epsilon: 0.9430571800012362
                                                                                       steps: 253
                                                                                                      lr: 0.0001
                                                                                                                      evaluati
episode: 682
               score: 1.0
                             memory length: 128910
                                                      epsilon: 0.9427562200012427
                                                                                       steps: 152
                                                                                                      lr: 0.0001
                                                                                                                      evaluation
episode: 683
                             memory length: 129186
                                                      epsilon: 0.9422097400012546
                                                                                       steps: 276
                                                                                                      lr: 0.0001
                                                                                                                      evaluatio
               score: 4.0
episode: 684
               score: 2.0
                             memory length: 129387
                                                      epsilon: 0.9418117600012632
                                                                                       steps: 201
                                                                                                      1r: 0.0001
                                                                                                                      evaluation
                                                      epsilon: 0.9415108000012697
episode: 685
               score: 1.0
                             memory length: 129539
                                                                                       steps: 152
                                                                                                      lr: 0.0001
                                                                                                                      evaluati
episode: 686
               score: 2.0
                             memory length: 129738
                                                      epsilon: 0.9411167800012783
                                                                                       steps: 199
                                                                                                      lr: 0.0001
                                                                                                                      evaluati
                                                                                                      lr: 0.0001
episode: 687
               score: 1.0
                             memory length: 129891
                                                      epsilon: 0.9408138400012849
                                                                                                                      evaluatio
                                                                                       steps: 153
episode: 688
               score: 2.0
                             memory length: 130090
                                                      epsilon: 0.9404198200012934
                                                                                       steps: 199
                                                                                                      lr: 0.0001
                                                                                                                      evaluatio
episode: 689
               score: 0.0
                             memory length: 130213
                                                      epsilon: 0.9401762800012987
                                                                                       steps: 123
                                                                                                      lr: 0.0001
                                                                                                                      evaluati
               score: 0.0
                                                                                      steps: 124
                                                                                                     lr: 0.0001
episode: 690
                             memory length: 130337
                                                      epsilon: 0.939930760001304
                                                                                                                     evaluation
episode: 691
               score: 2.0
                             memory length: 130536
                                                      epsilon: 0.9395367400013126
                                                                                       steps: 199
                                                                                                      lr: 0.0001
                                                                                                                      evaluation
                             memory length: 130755
                                                      epsilon: 0.939103120001322
episode: 692
               score: 2.0
                                                                                      steps: 219
                                                                                                     lr: 0.0001
                                                                                                                     evaluation
episode: 693
               score: 0.0
                             memory length: 130879
                                                      epsilon: 0.9388576000013273
                                                                                                      lr: 0.0001
                                                                                       steps: 124
                                                                                                                      evaluation
episode: 694
               score: 3.0
                             memory length: 131128
                                                      epsilon: 0.938364580001338
                                                                                      steps: 249
                                                                                                     lr: 0.0001
                                                                                                                     evaluation
episode: 695
               score: 0.0
                             memory length: 131252
                                                      epsilon: 0.9381190600013434
                                                                                                      lr: 0.0001
                                                                                                                      evaluati
                                                                                       steps: 124
episode: 696
               score: 2.0
                             memory length: 131451
                                                      epsilon: 0.9377250400013519
                                                                                       steps: 199
                                                                                                      lr: 0.0001
                                                                                                                      evaluation
episode: 697
               score: 0.0
                             memory length: 131575
                                                      epsilon: 0.9374795200013573
                                                                                                      lr: 0.0001
                                                                                                                      evaluatio
                                                                                       steps: 124
episode: 698
               score: 3.0
                             memory length: 131809
                                                      epsilon: 0.9370162000013673
                                                                                       steps: 234
                                                                                                      lr: 0.0001
                                                                                                                      evaluation
episode: 699
               score: 2.0
                             memory length: 132011
                                                      epsilon: 0.936616240001376
                                                                                      steps: 202
                                                                                                     lr: 0.0001
                                                                                                                     evaluation
episode: 700
               score: 4.0
                             memory length: 132313
                                                      epsilon: 0.936018280001389
                                                                                                     lr: 0.0001
                                                                                                                     evaluatio
                                                                                      steps: 302
episode: 701
                                                                                                      lr: 0.0001
               score: 0.0
                             memory length: 132437
                                                      epsilon: 0.9357727600013943
                                                                                       steps: 124
                                                                                                                      evaluation
episode: 702
               score: 4.0
                             memory length: 132733
                                                      epsilon: 0.935186680001407
                                                                                      steps: 296
                                                                                                     lr: 0.0001
                                                                                                                     evaluation
episode: 703
               score: 2.0
                             memory length: 132931
                                                      epsilon: 0.9347946400014155
                                                                                       steps: 198
                                                                                                      lr: 0.0001
                                                                                                                      evaluati
episode: 704
               score: 3.0
                             memory length: 133178
                                                      epsilon: 0.9343055800014262
                                                                                       steps: 247
                                                                                                      lr: 0.0001
                                                                                                                      evaluatio
episode: 705
               score: 0.0
                             memory length: 133302
                                                      epsilon: 0.9340600600014315
                                                                                       steps: 124
                                                                                                      lr: 0.0001
                                                                                                                      evaluatio
episode: 706
               score: 1.0
                             memory length: 133472
                                                      epsilon: 0.9337234600014388
                                                                                       steps: 170
                                                                                                      lr: 0.0001
                                                                                                                      evaluati
episode: 707
               score: 5.0
                             memory length: 133818
                                                      epsilon: 0.9330383800014537
                                                                                       steps: 346
                                                                                                      lr: 0.0001
                                                                                                                      evaluati
episode: 708
               score: 0.0
                             memory length: 133942
                                                      epsilon: 0.932792860001459
                                                                                      steps: 124
                                                                                                     lr: 0.0001
                                                                                                                     evaluatio:
episode: 709
               score: 2.0
                             memory length: 134123
                                                      epsilon: 0.9324344800014668
                                                                                                      lr: 0.0001
                                                                                                                      evaluati
                                                                                       steps: 181
episode: 710
               score: 1.0
                             memory length: 134293
                                                      epsilon: 0.9320978800014741
                                                                                       steps: 170
                                                                                                      lr: 0.0001
                                                                                                                      evaluati
                             memory length: 134492
episode: 711
                                                      epsilon: 0.9317038600014826
                                                                                                      1r: 0.0001
                                                                                                                      evaluatio
               score: 2.0
                                                                                       steps: 199
                                                      epsilon: 0.931458340001488
                                                                                                                     evaluatio:
episode: 712
               score: 0.0
                             memory length: 134616
                                                                                      steps: 124
                                                                                                     lr: 0.0001
episode: 713
               score: 0.0
                             memory length: 134739
                                                      epsilon: 0.9312148000014933
                                                                                       steps: 123
                                                                                                      lr: 0.0001
                                                                                                                      evaluati
episode: 714
               score: 2.0
                             memory length: 134963
                                                      epsilon: 0.9307712800015029
                                                                                       steps: 224
                                                                                                      lr: 0.0001
                                                                                                                      evaluatio
episode: 715
               score: 0.0
                             memory length: 135087
                                                      epsilon: 0.9305257600015082
                                                                                       steps: 124
                                                                                                      1r: 0.0001
                                                                                                                      evaluation
                             memory length: 135257
episode: 716
               score: 1.0
                                                      epsilon: 0.9301891600015155
                                                                                       steps: 170
                                                                                                      lr: 0.0001
                                                                                                                      evaluation
episode: 717
               score: 4.0
                             memory length: 135557
                                                      epsilon: 0.9295951600015284
                                                                                       steps: 300
                                                                                                      lr: 0.0001
                                                                                                                      evaluati
episode: 718
               score: 2.0
                             memory length: 135755
                                                      epsilon: 0.9292031200015369
                                                                                                      lr: 0.0001
                                                                                                                      evaluatio
                                                                                       steps: 198
                                                      epsilon: 0.9289576000015423
episode: 719
               score: 0.0
                             memory length: 135879
                                                                                       steps: 124
                                                                                                      lr: 0.0001
                                                                                                                      evaluatio
episode: 720
               score: 2.0
                             memory length: 136078
                                                      epsilon: 0.9285635800015508
                                                                                       steps: 199
                                                                                                      lr: 0.0001
                                                                                                                      evaluati
episode: 721
               score: 2.0
                             memory length: 136277
                                                      epsilon: 0.9281695600015594
                                                                                                      lr: 0.0001
                                                                                       steps: 199
                                                                                                                      evaluati
episode: 722
               score: 4.0
                             memory length: 136555
                                                      epsilon: 0.9276191200015713
                                                                                       steps: 278
                                                                                                      lr: 0.0001
                                                                                                                      evaluation
episode: 723
               score: 5.0
                             memory length: 136918
                                                      epsilon: 0.9269003800015869
                                                                                       steps: 363
                                                                                                      lr: 0.0001
                                                                                                                      evaluation
episode: 724
               score: 1.0
                             memory length: 137070
                                                      epsilon: 0.9265994200015935
                                                                                       steps: 152
                                                                                                      lr: 0.0001
                                                                                                                      evaluatio
episode: 725
               score: 1.0
                             memory length: 137241
                                                      epsilon: 0.9262608400016008
                                                                                       steps: 171
                                                                                                      lr: 0.0001
                                                                                                                      evaluation
episode: 726
               score: 0.0
                             memory length: 137365
                                                      epsilon: 0.9260153200016061
                                                                                       steps: 124
                                                                                                      lr: 0.0001
                                                                                                                      evaluatio
episode: 727
               score: 5.0
                             memory length: 137686
                                                      epsilon: 0.9253797400016199
                                                                                                      lr: 0.0001
                                                                                                                      evaluati
                                                                                       steps: 321
                                                                                       steps: 226
episode: 728
                             memory length: 137912
                                                      epsilon: 0.9249322600016296
                                                                                                      lr: 0.0001
                                                                                                                      evaluatio
               score: 3.0
episode: 729
               score: 0.0
                             memory length: 138035
                                                      epsilon: 0.9246887200016349
                                                                                       steps: 123
                                                                                                      lr: 0.0001
                                                                                                                      evaluation
episode: 730
               score: 3.0
                             memory length: 138261
                                                      epsilon: 0.9242412400016446
                                                                                       steps: 226
                                                                                                      lr: 0.0001
                                                                                                                      evaluation
                                                      epsilon: 0.9238472200016532
                                                                                                      lr: 0.0001
episode: 731
               score: 2.0
                             memory length: 138460
                                                                                       steps: 199
                                                                                                                      evaluatio
episode: 732
               score: 1.0
                             memory length: 138629
                                                      epsilon: 0.9235126000016605
                                                                                       steps: 169
                                                                                                      lr: 0.0001
                                                                                                                      evaluation
episode: 733
               score: 2.0
                             memory length: 138849
                                                      epsilon: 0.9230770000016699
                                                                                       steps: 220
                                                                                                      lr: 0.0001
                                                                                                                      evaluati
episode: 734
               score: 2.0
                             memory length: 139068
                                                      epsilon: 0.9226433800016793
                                                                                       steps: 219
                                                                                                      lr: 0.0001
                                                                                                                      evaluati
episode: 735
               score: 0.0
                             memory length: 139191
                                                      epsilon: 0.9223998400016846
                                                                                       steps: 123
                                                                                                      lr: 0.0001
                                                                                                                      evaluatio
episode: 736
               score: 0.0
                             memory length: 139315
                                                      epsilon: 0.92215432000169
                                                                                     steps: 124
                                                                                                    lr: 0.0001
                                                                                                                    evaluation
episode: 737
               score: 2.0
                             memory length: 139501
                                                      epsilon: 0.921786040001698
                                                                                      steps: 186
                                                                                                     lr: 0.0001
                                                                                                                     evaluation
                             memory length: 139719
                                                      ensilon: 0.9213544000017073
                                                                                                      lr: 0.0001
enisode: 738
               score: 2.0
                                                                                       steps: 218
                                                                                                                      evaluatio
episode: 739
               score: 2.0
                             memory length: 139938
                                                      epsilon: 0.9209207800017167
                                                                                       steps: 219
                                                                                                      lr: 0.0001
                                                                                                                      evaluation
               score: 2.0
                             memory length: 140137
                                                      epsilon: 0.9205267600017253
                                                                                                      lr: 0.0001
                                                                                                                      evaluati
episode: 740
                                                                                       steps: 199
episode: 741
               score: 2.0
                                                      epsilon: 0.9200971000017346
                                                                                                      lr: 0.0001
                             memory length: 140354
                                                                                       steps: 217
                                                                                                                      evaluation
episode: 742
                                                      ensilon: 0.9196991200017433
                                                                                                      1r: 0.0001
                                                                                                                      evaluatio
               score: 2.0
                             memory length: 140555
                                                                                       steps: 201
                                                      epsilon: 0.9194536000017486
episode: 743
               score: 0.0
                             memory length: 140679
                                                                                       steps: 124
                                                                                                      lr: 0.0001
                                                                                                                      evaluation
episode: 744
               score: 1.0
                             memory length: 140848
                                                      epsilon: 0.9191189800017558
                                                                                       steps: 169
                                                                                                      lr: 0.0001
                                                                                                                      evaluation
                             memory length: 141000
episode: 745
               score: 1.0
                                                      epsilon: 0.9188180200017624
                                                                                       steps: 152
                                                                                                      lr: 0.0001
                                                                                                                      evaluatio
episode: 746
               score: 0.0
                             memory length: 141124
                                                      epsilon: 0.9185725000017677
                                                                                       steps: 124
                                                                                                      lr: 0.0001
                                                                                                                      evaluation
episode: 747
               score: 2.0
                             memory length: 141323
                                                      epsilon: 0.9181784800017763
                                                                                       steps: 199
                                                                                                      lr: 0.0001
                                                                                                                      evaluation
episode: 748
               score: 3.0
                             memory length: 141550
                                                      epsilon: 0.917729020001786
                                                                                      steps: 227
                                                                                                     lr: 0.0001
                                                                                                                     evaluation
episode: 749
                                                      epsilon: 0.9174835000017914
               score: 0.0
                             memory length: 141674
                                                                                                      lr: 0.0001
                                                                                                                      evaluatio
                                                                                       steps: 124
episode: 750
               score: 1.0
                             memory length: 141825
                                                      epsilon: 0.9171845200017978
                                                                                       steps: 151
                                                                                                      lr: 0.0001
                                                                                                                      evaluati
```

```
steps: 172
episode: 751
               score: 1.0
                             memory length: 141997
                                                       epsilon: 0.9168439600018052
                                                                                                       lr: 0.0001
                                                                                                                       evaluati
episode: 752
                                                       epsilon: 0.9164499400018138
                                                                                                       lr: 0.0001
               score: 2.0
                             memory length: 142196
                                                                                        steps: 199
                                                                                                                       evaluatio
episode: 753
               score: 0.0
                             memory length: 142320
                                                       epsilon: 0.9162044200018191
                                                                                        steps: 124
                                                                                                       1r: 0.0001
                                                                                                                       evaluation
                                                                                                       lr: 0.0001
episode: 754
               score: 4.0
                             memory length: 142614
                                                       epsilon: 0.9156223000018318
                                                                                        steps: 294
                                                                                                                       evaluation
episode: 755
                             memory length: 142833
                                                       epsilon: 0.9151886800018412
                                                                                                       lr: 0.0001
                                                                                                                       evaluati
               score: 2.0
                                                                                        steps: 219
episode: 756
                                                       epsilon: 0.9148897000018477
                                                                                                       lr: 0.0001
               score: 1.0
                             memory length: 142984
                                                                                        steps: 151
                                                                                                                      evaluation
episode: 757
               score: 1.0
                             memory length: 143136
                                                       epsilon: 0.9145887400018542
                                                                                        steps: 152
                                                                                                      1r: 0.0001
                                                                                                                       evaluatio
episode: 758
               score: 0.0
                             memory length: 143260
                                                       epsilon: 0.9143432200018595
                                                                                        steps: 124
                                                                                                       lr: 0.0001
                                                                                                                       evaluation
episode: 759
               score: 1.0
                             memory length: 143431
                                                       epsilon: 0.9140046400018669
                                                                                        steps: 171
                                                                                                       lr: 0.0001
                                                                                                                      evaluatio
                                                       epsilon: 0.9135650800018764
episode: 760
               score: 2.0
                             memory length: 143653
                                                                                        steps: 222
                                                                                                      1r: 0.0001
                                                                                                                       evaluation
episode: 761
               score: 3.0
                             memory length: 143883
                                                       epsilon: 0.9131096800018863
                                                                                        steps: 230
                                                                                                       lr: 0.0001
                                                                                                                       evaluati
episode: 762
               score: 0.0
                             memory length: 144007
                                                       epsilon: 0.9128641600018916
                                                                                        steps: 124
                                                                                                      lr: 0.0001
                                                                                                                      evaluation
episode: 763
               score: 0.0
                             memory length: 144131
                                                       epsilon: 0.912618640001897
                                                                                       steps: 124
                                                                                                      1r: 0.0001
                                                                                                                      evaluation
episode: 764
               score: 2.0
                             memory length: 144351
                                                       epsilon: 0.9121830400019064
                                                                                                      lr: 0.0001
                                                                                                                       evaluati
                                                                                        steps: 220
               score: 2.0
episode: 765
                             memory length: 144549
                                                       epsilon: 0.9117910000019149
                                                                                        steps: 198
                                                                                                      lr: 0.0001
                                                                                                                      evaluati
episode: 766
                             memory length: 144721
                                                                                                      lr: 0.0001
                                                       ensilon: 0.9114504400019223
                                                                                        steps: 172
                                                                                                                       evaluatio
               score: 1.0
episode: 767
               score: 3.0
                             memory length: 144990
                                                       epsilon: 0.9109178200019339
                                                                                        steps: 269
                                                                                                      lr: 0.0001
                                                                                                                      evaluation
episode: 768
               score: 1.0
                             memory length: 145160
                                                       epsilon: 0.9105812200019412
                                                                                        steps: 170
                                                                                                       lr: 0.0001
                                                                                                                       evaluation
episode: 769
                             memory length: 145311
                                                       epsilon: 0.9102822400019477
                                                                                                      lr: 0.0001
                                                                                                                      evaluatio
               score: 1.0
                                                                                        steps: 151
episode: 770
                                                       epsilon: 0.910036720001953
               score: 0.0
                             memory length: 145435
                                                                                       steps: 124
                                                                                                      1r: 0.0001
                                                                                                                      evaluation
episode: 771
               score: 1.0
                             memory length: 145605
                                                       epsilon: 0.9097001200019603
                                                                                        steps: 170
                                                                                                      lr: 0.0001
                                                                                                                      evaluati
episode: 772
               score: 1.0
                             memory length: 145778
                                                       epsilon: 0.9093575800019678
                                                                                        steps: 173
                                                                                                       lr: 0.0001
                                                                                                                       evaluati
episode: 773
               score: 2.0
                                                       epsilon: 0.9089219800019772
                                                                                                       lr: 0.0001
                             memory length: 145998
                                                                                        steps: 220
                                                                                                                      evaluatio
episode: 774
               score: 4.0
                             memory length: 146274
                                                       epsilon: 0.9083755000019891
                                                                                        steps: 276
                                                                                                       lr: 0.0001
                                                                                                                       evaluation
episode: 775
               score: 0.0
                             memory length: 146398
                                                       epsilon: 0.9081299800019944
                                                                                        steps: 124
                                                                                                       lr: 0.0001
                                                                                                                       evaluation
episode: 776
               score: 5.0
                                                       epsilon: 0.9074468800020092
                                                                                                      lr: 0.0001
                             memory length: 146743
                                                                                        steps: 345
                                                                                                                      evaluatio
episode: 777
               score: 0.0
                             memory length: 146867
                                                       epsilon: 0.9072013600020146
                                                                                        steps: 124
                                                                                                       lr: 0.0001
                                                                                                                       evaluation
episode: 778
               score: 4.0
                             memory length: 147166
                                                       epsilon: 0.9066093400020274
                                                                                        steps: 299
                                                                                                       lr: 0.0001
                                                                                                                       evaluation
               score: 3.0
                                                                                                                      evaluati
episode: 779
                             memory length: 147392
                                                       epsilon: 0.9061618600020371
                                                                                        steps: 226
                                                                                                       lr: 0.0001
episode: 780
               score: 0.0
                             memory length: 147515
                                                       epsilon: 0.9059183200020424
                                                                                        steps: 123
                                                                                                       1r: 0.0001
                                                                                                                       evaluation
episode: 781
               score: 2.0
                             memory length: 147717
                                                       epsilon: 0.9055183600020511
                                                                                        steps: 202
                                                                                                       lr: 0.0001
                                                                                                                       evaluatio
episode: 782
               score: 6.0
                             memory length: 147937
                                                       epsilon: 0.9050827600020606
                                                                                        steps: 220
                                                                                                       lr: 0.0001
                                                                                                                       evaluation
episode: 783
                             memory length: 148169
                                                       epsilon: 0.9046234000020705
                                                                                        steps: 232
                                                                                                      lr: 0.0001
                                                                                                                      evaluatio
               score: 3.0
episode: 784
               score: 1.0
                             memory length: 148320
                                                       epsilon: 0.904324420002077
                                                                                       steps: 151
                                                                                                      1r: 0.0001
                                                                                                                      evaluation
                             memory length: 148444
episode: 785
               score: 0.0
                                                       epsilon: 0.9040789000020824
                                                                                        steps: 124
                                                                                                      lr: 0.0001
                                                                                                                       evaluation
                                                                                                       lr: 0.0001
episode: 786
               score: 4.0
                             memory length: 148704
                                                       epsilon: 0.9035641000020935
                                                                                        steps: 260
                                                                                                                      evaluatio
episode: 787
               score: 2.0
                             memory length: 148903
                                                       epsilon: 0.9031700800021021
                                                                                        steps: 199
                                                                                                       lr: 0.0001
                                                                                                                      evaluation
episode: 788
               score: 2.0
                             memory length: 149102
                                                       epsilon: 0.9027760600021106
                                                                                                      lr: 0.0001
                                                                                        steps: 199
                                                                                                                       evaluation
episode: 789
               score: 0.0
                             memory length: 149226
                                                       epsilon: 0.902530540002116
                                                                                       steps: 124
                                                                                                      lr: 0.0001
                                                                                                                      evaluation
episode: 790
               score: 2.0
                             memory length: 149426
                                                       epsilon: 0.9021345400021246
                                                                                                      lr: 0.0001
                                                                                        steps: 200
                                                                                                                      evaluatio
episode: 791
               score: 3.0
                             memory length: 149640
                                                       epsilon: 0.9017108200021338
                                                                                        steps: 214
                                                                                                      lr: 0.0001
                                                                                                                       evaluation
episode: 792
               score: 3.0
                             memory length: 149868
                                                       epsilon: 0.9012593800021436
                                                                                        steps: 228
                                                                                                       lr: 0.0001
                                                                                                                       evaluation
episode: 793
               score: 2.0
                                                                                       steps: 220
                             memory length: 150088
                                                       epsilon: 0.900823780002153
                                                                                                      lr: 0.0001
                                                                                                                      evaluatio:
episode: 794
                                                       epsilon: 0.9004297600021616
               score: 2.0
                             memory length: 150287
                                                                                        steps: 199
                                                                                                      1r: 0.0001
                                                                                                                      evaluation
                                                                                                                       evaluati
episode: 795
               score: 1.0
                             memory length: 150457
                                                       epsilon: 0.9000931600021689
                                                                                        steps: 170
                                                                                                       lr: 0.0001
episode: 796
               score: 2.0
                             memory length: 150675
                                                       epsilon: 0.8996615200021782
                                                                                        steps: 218
                                                                                                      lr: 0.0001
                                                                                                                      evaluati
episode: 797
                             memory length: 150827
                                                       ensilon: 0.8993605600021848
                                                                                                      1r: 0.0001
                                                                                                                       evaluatio
               score: 1.0
                                                                                        steps: 152
                                                       epsilon: 0.8987665600021977
episode: 798
               score: 4.0
                             memory length: 151127
                                                                                        steps: 300
                                                                                                      lr: 0.0001
                                                                                                                      evaluation
episode: 799
               score: 3.0
                             memory length: 151356
                                                       epsilon: 0.8983131400022075
                                                                                        steps: 229
                                                                                                       lr: 0.0001
                                                                                                                       evaluation
episode: 800
               score: 3.0
                             memory length: 151604
                                                       epsilon: 0.8978221000022182
                                                                                        steps: 248
                                                                                                       lr: 0.0001
                                                                                                                      evaluatio
                                                       epsilon: 0.8974815400022256
episode: 801
               score: 1.0
                             memory length: 151776
                                                                                        steps: 172
                                                                                                      1r: 0.0001
                                                                                                                      evaluation
                             memory length: 152005
                                                       epsilon: 0.8970281200022354
episode: 802
               score: 3.0
                                                                                        steps: 229
                                                                                                       lr: 0.0001
                                                                                                                       evaluation
episode: 803
               score: 3.0
                             memory length: 152252
                                                       epsilon: 0.896539060002246
                                                                                       steps: 247
                                                                                                      lr: 0.0001
                                                                                                                      evaluation
               score: 2.0
episode: 804
                             memory length: 152451
                                                       epsilon: 0.8961450400022546
                                                                                                      lr: 0.0001
                                                                                       steps: 199
                                                                                                                      evaluation
episode: 805
               score: 1.0
                             memory length: 152624
                                                       epsilon: 0.895802500002262
                                                                                       steps: 173
                                                                                                      lr: 0.0001
                                                                                                                      evaluation
episode: 806
               score: 3.0
                             memory length: 152850
                                                       epsilon: 0.8953550200022717
                                                                                        steps: 226
                                                                                                       lr: 0.0001
                                                                                                                      evaluation
               score: 2.0
                             memory length: 153072
                                                       epsilon: 0.8949154600022813
                                                                                                       lr: 0.0001
episode: 807
                                                                                        steps: 222
                                                                                                                      evaluatio
episode: 808
               score: 0.0
                             memory length: 153195
                                                       epsilon: 0.8946719200022866
                                                                                        steps: 123
                                                                                                      lr: 0.0001
                                                                                                                       evaluation
                             memory length: 153367
                                                       epsilon: 0.894331360002294
                                                                                                      lr: 0.0001
episode: 809
               score: 1.0
                                                                                       steps: 172
                                                                                                                      evaluation
episode: 810
               score: 2.0
                             memory length: 153565
                                                       epsilon: 0.8939393200023025
                                                                                                      lr: 0.0001
                                                                                       steps: 198
                                                                                                                      evaluation
                             memory length: 153767
                                                                                                       1r: 0.0001
                                                                                                                       evaluatio
episode: 811
               score: 2.0
                                                       epsilon: 0.8935393600023112
                                                                                        steps: 202
episode: 812
               score: 3.0
                             memory length: 154031
                                                       epsilon: 0.8930166400023225
                                                                                        steps: 264
                                                                                                       lr: 0.0001
                                                                                                                       evaluatio
episode: 813
               score: 2.0
                             memory length: 154250
                                                       epsilon: 0.8925830200023319
                                                                                        steps: 219
                                                                                                       lr: 0.0001
                                                                                                                       evaluation
                             memory length: 154479
                                                       epsilon: 0.8921296000023418
                                                                                                       lr: 0.0001
                                                                                                                      evaluatio
episode: 814
               score: 3.0
                                                                                        steps: 229
episode: 815
               score: 2.0
                             memory length: 154677
                                                       epsilon: 0.8917375600023503
                                                                                        steps: 198
                                                                                                      1r: 0.0001
                                                                                                                      evaluation
episode: 816
               score: 2.0
                             memory length: 154876
                                                       epsilon: 0.8913435400023588
                                                                                        steps: 199
                                                                                                       lr: 0.0001
                                                                                                                       evaluation
episode: 817
                             memory length: 155028
                                                       epsilon: 0.8910425800023654
                                                                                                       lr: 0.0001
               score: 1.0
                                                                                        steps: 152
                                                                                                                       evaluation
                                                                                                       lr: 0.0001
episode: 818
               score: 3.0
                             memory length: 155278
                                                       epsilon: 0.8905475800023761
                                                                                        steps: 250
                                                                                                                      evaluation
episode: 819
               score: 4.0
                             memory length: 155573
                                                       epsilon: 0.8899634800023888
                                                                                        steps: 295
                                                                                                       lr: 0.0001
                                                                                                                       evaluatio
episode: 820
               score: 2.0
                             memory length: 155771
                                                       epsilon: 0.8895714400023973
                                                                                        steps: 198
                                                                                                       lr: 0.0001
                                                                                                                       evaluation
               score: 2.0
                                                       epsilon: 0.8891774200024058
episode: 821
                             memory length: 155970
                                                                                                       lr: 0.0001
                                                                                                                      evaluatio
                                                                                        steps: 199
episode: 822
               score: 4.0
                             memory length: 156266
                                                       epsilon: 0.8885913400024186
                                                                                        steps: 296
                                                                                                      lr: 0.0001
                                                                                                                       evaluation
episode: 823
               score: 2.0
                             memory length: 156485
                                                       epsilon: 0.888157720002428
                                                                                       steps: 219
                                                                                                      lr: 0.0001
                                                                                                                      evaluation
episode: 824
               score: 0.0
                             memory length: 156609
                                                       epsilon: 0.8879122000024333
                                                                                                      lr: 0.0001
                                                                                       steps: 124
                                                                                                                      evaluation
episode: 825
               score: 3.0
                             memory length: 156857
                                                       epsilon: 0.887421160002444
                                                                                       steps: 248
                                                                                                      1r: 0.0001
                                                                                                                      evaluation
episode: 826
                             memory length: 157010
                                                       epsilon: 0.8871182200024506
                                                                                                      lr: 0.0001
               score: 1.0
                                                                                        steps: 153
                                                                                                                      evaluation
               score: 1.0
                                                       epsilon: 0.886819240002457
                                                                                       steps: 151
                                                                                                      lr: 0.0001
episode: 827
                             memory length: 157161
                                                                                                                      evaluatio:
                             memory length: 157313
episode: 828
               score: 1.0
                                                       ensilon: 0.8865182800024636
                                                                                        steps: 152
                                                                                                      1r: 0.0001
                                                                                                                      evaluation
                             memory length: 157437
                                                       epsilon: 0.8862727600024689
episode: 829
               score: 0.0
                                                                                        steps: 124
                                                                                                      lr: 0.0001
                                                                                                                      evaluation
episode: 830
               score: 2.0
                             memory length: 157636
                                                       epsilon: 0.8858787400024775
                                                                                        steps: 199
                                                                                                       lr: 0.0001
                                                                                                                       evaluation
                             memory length: 157837
                                                                                                                      evaluatio
episode: 831
               score: 2.0
                                                       epsilon: 0.8854807600024861
                                                                                        steps: 201
                                                                                                       lr: 0.0001
episode: 832
               score: 1.0
                             memory length: 158007
                                                       epsilon: 0.8851441600024934
                                                                                        steps: 170
                                                                                                       lr: 0.0001
                                                                                                                      evaluation
episode: 833
               score: 1.0
                             memory length: 158159
                                                       epsilon: 0.8848432000024999
                                                                                        steps: 152
                                                                                                       lr: 0.0001
                                                                                                                       evaluation
episode: 834
                                                                                        steps: 315
               score: 4.0
                             memory length: 158474
                                                       epsilon: 0.8842195000025135
                                                                                                       lr: 0.0001
                                                                                                                      evaluation
enisode: 835
               score: 4 0
                             memory length: 158790
                                                       ensilon: 0 8835938200025271
                                                                                        stens: 316
                                                                                                       1r. 0 0001
                                                                                                                       evaluati
```

```
prehp. 110
                             memora renden. 100/20
chracae. 022
               DCOTE: 4.0
                                                       chatton. 0.0020320000007711
                                                                                                       TT . U . U U U T
                                                                                                                       Evaluatit
                                                       epsilon: 0.8831978200025357
episode: 836
               score: 2.0
                             memory length: 158990
                                                                                        steps: 200
                                                                                                       lr: 0.0001
                                                                                                                       evaluatio
episode: 837
               score: 2.0
                             memory length: 159189
                                                       epsilon: 0.8828038000025442
                                                                                        steps: 199
                                                                                                       lr: 0.0001
                                                                                                                       evaluation
               score: 2.0
episode: 838
                             memory length: 159408
                                                       epsilon: 0.8823701800025536
                                                                                        steps: 219
                                                                                                      lr: 0.0001
                                                                                                                      evaluati
episode: 839
               score: 5.0
                             memory length: 159695
                                                       epsilon: 0.881801920002566
                                                                                       steps: 287
                                                                                                      1r: 0.0001
                                                                                                                      evaluation
                             memory length: 159895
                                                       epsilon: 0.8814059200025746
                                                                                                      lr: 0.0001
episode: 840
               score: 2.0
                                                                                        steps: 200
                                                                                                                       evaluation
episode: 841
                             memory length: 160144
                                                       epsilon: 0.8809129000025853
                                                                                        steps: 249
                                                                                                       lr: 0.0001
                                                                                                                       evaluati
               score: 3.0
episode: 842
               score: 0.0
                             memory length: 160268
                                                       epsilon: 0.8806673800025906
                                                                                        steps: 124
                                                                                                       lr: 0.0001
                                                                                                                      evaluation
episode: 843
               score: 3.0
                             memory length: 160517
                                                       epsilon: 0.8801743600026013
                                                                                        steps: 249
                                                                                                      lr: 0.0001
                                                                                                                       evaluatio
episode: 844
               score: 3.0
                             memory length: 160761
                                                       epsilon: 0.8796912400026118
                                                                                        steps: 244
                                                                                                       lr: 0.0001
                                                                                                                       evaluati
episode: 845
               score: 2.0
                             memory length: 160960
                                                       epsilon: 0.8792972200026203
                                                                                                      lr: 0.0001
                                                                                        steps: 199
                                                                                                                      evaluatio
episode: 846
               score: 3.0
                             memory length: 161230
                                                       epsilon: 0.878762620002632
                                                                                       steps: 270
                                                                                                      lr: 0.0001
                                                                                                                      evaluation
episode: 847
               score: 3.0
                             memory length: 161477
                                                       epsilon: 0.8782735600026426
                                                                                        steps: 247
                                                                                                       lr: 0.0001
                                                                                                                       evaluati
episode: 848
               score: 4.0
                                                                                        steps: 278
                             memory length: 161755
                                                       epsilon: 0.8777231200026545
                                                                                                      lr: 0.0001
                                                                                                                      evaluation
episode: 849
                             memory length: 161985
                                                       epsilon: 0.8772677200026644
                                                                                                      lr: 0.0001
                                                                                                                      evaluatio
               score: 3.0
                                                                                        steps: 230
episode: 850
                             memory length: 162157
                                                       epsilon: 0.8769271600026718
                                                                                        steps: 172
                                                                                                       lr: 0.0001
                                                                                                                       evaluatio
               score: 1.0
episode: 851
               score: 4.0
                             memory length: 162455
                                                       epsilon: 0.8763371200026846
                                                                                        steps: 298
                                                                                                      lr: 0.0001
                                                                                                                      evaluati
episode: 852
                             memory length: 162684
                                                       ensilon: 0.8758837000026944
                                                                                        steps: 229
                                                                                                      1r: 0.0001
                                                                                                                      evaluatio
               score: 3.0
episode: 853
               score: 1.0
                             memory length: 162836
                                                       epsilon: 0.875582740002701
                                                                                       steps: 152
                                                                                                      1r: 0.0001
                                                                                                                      evaluatio:
                             memory length: 163221
episode: 854
               score: 7.0
                                                       epsilon: 0.8748204400027175
                                                                                        steps: 385
                                                                                                      lr: 0.0001
                                                                                                                       evaluation
episode: 855
               score: 0.0
                             memory length: 163344
                                                       epsilon: 0.8745769000027228
                                                                                        steps: 123
                                                                                                      lr: 0.0001
                                                                                                                      evaluatio
episode: 856
                                                       epsilon: 0.8742165400027306
               score: 2.0
                             memory length: 163526
                                                                                        steps: 182
                                                                                                      1r: 0.0001
                                                                                                                      evaluation
episode: 857
                                                       epsilon: 0.8739175600027371
               score: 1.0
                             memory length: 163677
                                                                                        steps: 151
                                                                                                      1r: 0.0001
                                                                                                                       evaluatio
episode: 858
               score: 1.0
                             memory length: 163829
                                                       epsilon: 0.8736166000027437
                                                                                        steps: 152
                                                                                                       lr: 0.0001
                                                                                                                      evaluati
                                                                                                      lr: 0.0001
episode: 859
               score: 1.0
                             memory length: 164001
                                                       epsilon: 0.873276040002751
                                                                                       steps: 172
                                                                                                                      evaluation
episode: 860
               score: 4.0
                             memory length: 164315
                                                       epsilon: 0.8726543200027645
                                                                                        steps: 314
                                                                                                      lr: 0.0001
                                                                                                                      evaluation
episode: 861
               score: 3.0
                             memory length: 164560
                                                       epsilon: 0.8721692200027751
                                                                                        steps: 245
                                                                                                       lr: 0.0001
                                                                                                                       evaluation
episode: 862
               score: 0.0
                             memory length: 164684
                                                       epsilon: 0.8719237000027804
                                                                                                      lr: 0.0001
                                                                                                                      evaluatio
                                                                                        steps: 124
episode: 863
                                                                                                       lr: 0.0001
               score: 4.0
                             memory length: 164962
                                                       epsilon: 0.8713732600027924
                                                                                        steps: 278
                                                                                                                      evaluation
                                                       epsilon: 0.8710366600027997
episode: 864
               score: 1.0
                             memory length: 165132
                                                                                                      lr: 0.0001
                                                                                                                      evaluati
                                                                                        steps: 170
episode: 865
               score: 2.0
                             memory length: 165350
                                                       epsilon: 0.870605020002809
                                                                                       steps: 218
                                                                                                      lr: 0.0001
                                                                                                                      evaluatio:
                             memory length: 165572
                                                       ensilon: 0.8701654600028186
                                                                                                      1r: 0.0001
episode: 866
               score: 2.0
                                                                                        steps: 222
                                                                                                                      evaluation
                                                       epsilon: 0.8695774000028313
episode: 867
               score: 4.0
                             memory length: 165869
                                                                                        steps: 297
                                                                                                       lr: 0.0001
                                                                                                                       evaluatio
episode: 868
               score: 3.0
                             memory length: 166115
                                                       epsilon: 0.8690903200028419
                                                                                        steps: 246
                                                                                                       lr: 0.0001
                                                                                                                       evaluation
episode: 869
               score: 4.0
                             memory length: 166412
                                                       epsilon: 0.8685022600028547
                                                                                        steps: 297
                                                                                                       lr: 0.0001
                                                                                                                      evaluatio
episode: 870
                                                       epsilon: 0.8680528000028644
               score: 3.0
                             memory length: 166639
                                                                                        steps: 227
                                                                                                       1r: 0.0001
                                                                                                                      evaluation
episode: 871
               score: 4.0
                             memory length: 166915
                                                       epsilon: 0.8675063200028763
                                                                                        steps: 276
                                                                                                       lr: 0.0001
                                                                                                                       evaluation
                             memory length: 167086
                                                       epsilon: 0.8671677400028837
                                                                                                       lr: 0.0001
episode: 872
               score: 1.0
                                                                                        steps: 171
                                                                                                                       evaluation
               score: 5.0
                                                       epsilon: 0.8665202800028977
                                                                                                       lr: 0.0001
episode: 873
                             memory length: 167413
                                                                                        steps: 327
                                                                                                                      evaluation
episode: 874
               score: 1.0
                             memory length: 167565
                                                       epsilon: 0.8662193200029042
                                                                                        steps: 152
                                                                                                      lr: 0.0001
                                                                                                                       evaluation
episode: 875
               score: 4.0
                             memory length: 167861
                                                       epsilon: 0.865633240002917
                                                                                       steps: 296
                                                                                                      lr: 0.0001
                                                                                                                      evaluation
               score: 2.0
                                                       epsilon: 0.8652352600029256
                                                                                                      lr: 0.0001
episode: 876
                             memory length: 168062
                                                                                        steps: 201
                                                                                                                      evaluatio
episode: 877
               score: 1.0
                             memory length: 168232
                                                       epsilon: 0.8648986600029329
                                                                                        steps: 170
                                                                                                      1r: 0.0001
                                                                                                                       evaluation
episode: 878
               score: 2.0
                             memory length: 168431
                                                       epsilon: 0.8645046400029415
                                                                                        steps: 199
                                                                                                       lr: 0.0001
                                                                                                                       evaluation
episode: 879
               score: 2.0
                                                       epsilon: 0.8640690400029509
                             memory length: 168651
                                                                                        steps: 220
                                                                                                      lr: 0.0001
                                                                                                                      evaluation
episode: 880
               score: 6.0
                             memory length: 168984
                                                       ensilon: 0.8634097000029652
                                                                                        steps: 333
                                                                                                      1r: 0.0001
                                                                                                                      evaluatio
episode: 881
               score: 1.0
                             memory length: 169154
                                                       epsilon: 0.8630731000029725
                                                                                        steps: 170
                                                                                                       lr: 0.0001
                                                                                                                       evaluatio
episode: 882
               score: 2.0
                             memory length: 169335
                                                       epsilon: 0.8627147200029803
                                                                                        steps: 181
                                                                                                       lr: 0.0001
                                                                                                                       evaluati
                             memory length: 169534
episode: 883
               score: 2.0
                                                       ensilon: 0.8623207000029889
                                                                                        steps: 199
                                                                                                      1r: 0.0001
                                                                                                                       evaluatio
episode: 884
               score: 3.0
                             memory length: 169766
                                                       epsilon: 0.8618613400029989
                                                                                        steps: 232
                                                                                                       lr: 0.0001
                                                                                                                      evaluation
                             memory length: 170044
                                                                                                       lr: 0.0001
episode: 885
               score: 4.0
                                                       epsilon: 0.8613109000030108
                                                                                        steps: 278
                                                                                                                       evaluation
episode: 886
                             memory length: 170294
                                                       epsilon: 0.8608159000030216
                                                                                                       lr: 0.0001
               score: 3.0
                                                                                        steps: 250
                                                                                                                      evaluatio
episode: 887
               score: 3.0
                             memory length: 170540
                                                       ensilon: 0.8603288200030321
                                                                                        steps: 246
                                                                                                       1r: 0.0001
                                                                                                                      evaluation
episode: 888
               score: 4.0
                             memory length: 170818
                                                       epsilon: 0.8597783800030441
                                                                                        steps: 278
                                                                                                      1r: 0.0001
                                                                                                                       evaluatio
episode: 889
               score: 3.0
                             memory length: 171069
                                                       epsilon: 0.8592814000030549
                                                                                        steps: 251
                                                                                                       lr: 0.0001
                                                                                                                       evaluati
episode: 890
               score: 0.0
                             memory length: 171193
                                                       epsilon: 0.8590358800030602
                                                                                        steps: 124
                                                                                                      lr: 0.0001
                                                                                                                      evaluatio
episode: 891
               score: 3.0
                             memory length: 171419
                                                       epsilon: 0.8585884000030699
                                                                                        steps: 226
                                                                                                      lr: 0.0001
                                                                                                                       evaluation
episode: 892
               score: 2.0
                             memory length: 171618
                                                       epsilon: 0.8581943800030785
                                                                                        steps: 199
                                                                                                       lr: 0.0001
                                                                                                                       evaluation
episode: 893
               score: 5.0
                             memory length: 171924
                                                       epsilon: 0.8575885000030916
                                                                                        steps: 306
                                                                                                      lr: 0.0001
                                                                                                                      evaluatio
episode: 894
               score: 2.0
                             memory length: 172123
                                                       epsilon: 0.8571944800031002
                                                                                        steps: 199
                                                                                                       lr: 0.0001
                                                                                                                       evaluatio
episode: 895
               score: 0.0
                             memory length: 172247
                                                       epsilon: 0.8569489600031055
                                                                                        steps: 124
                                                                                                       lr: 0.0001
                                                                                                                       evaluation
episode: 896
               score: 5.0
                                                                                                                      evaluati
                             memory length: 172540
                                                       epsilon: 0.8563688200031181
                                                                                        steps: 293
                                                                                                      lr: 0.0001
                             memory length: 172856
episode: 897
                                                       ensilon: 0.8557431400031317
                                                                                                      1r: 0.0001
                                                                                                                      evaluatio
               score: 5.0
                                                                                        steps: 316
episode: 898
               score: 2.0
                             memory length: 173072
                                                       epsilon: 0.855315460003141
                                                                                       steps: 216
                                                                                                      lr: 0.0001
                                                                                                                      evaluation
episode: 899
               score: 2.0
                             memory length: 173293
                                                       epsilon: 0.8548778800031505
                                                                                        steps: 221
                                                                                                      lr: 0.0001
                                                                                                                       evaluation
episode: 900
                             memory length: 173492
                                                                                       steps: 199
                                                                                                      lr: 0.0001
                                                                                                                      evaluatio
               score: 2.0
                                                       epsilon: 0.854483860003159
episode: 901
                                                       epsilon: 0.8537671000031746
               score: 5.0
                             memory length: 173854
                                                                                        steps: 362
                                                                                                      1r: 0.0001
                                                                                                                      evaluation
episode: 902
                             memory length: 174080
                                                       epsilon: 0.8533196200031843
                                                                                                       lr: 0.0001
               score: 3.0
                                                                                        steps: 226
                                                                                                                       evaluation
episode: 903
                             memory length: 174329
                                                       epsilon: 0.852826600003195
                                                                                       steps: 249
                                                                                                      lr: 0.0001
                                                                                                                      evaluatio:
               score: 3.0
episode: 904
               score: 2.0
                                                       epsilon: 0.8523989200032043
                                                                                                      lr: 0.0001
                             memory length: 174545
                                                                                        steps: 216
                                                                                                                      evaluation
               score: 2.0
episode: 905
                             memory length: 174765
                                                       epsilon: 0.8519633200032137
                                                                                        steps: 220
                                                                                                      lr: 0.0001
                                                                                                                       evaluatio
episode: 906
               score: 2.0
                             memory length: 174964
                                                       epsilon: 0.8515693000032223
                                                                                        steps: 199
                                                                                                       lr: 0.0001
                                                                                                                       evaluati
episode: 907
               score: 0.0
                                                       epsilon: 0.8513237800032276
                                                                                                      lr: 0.0001
                             memory length: 175088
                                                                                        steps: 124
                                                                                                                      evaluatio
episode: 908
               score: 3.0
                             memory length: 175334
                                                       epsilon: 0.8508367000032382
                                                                                        steps: 246
                                                                                                       lr: 0.0001
                                                                                                                       evaluation
episode: 909
               score: 4.0
                             memory length: 175618
                                                       epsilon: 0.8502743800032504
                                                                                        steps: 284
                                                                                                       lr: 0.0001
                                                                                                                       evaluati
               score: 2.0
episode: 910
                             memory length: 175820
                                                       epsilon: 0.8498744200032591
                                                                                        steps: 202
                                                                                                       lr: 0.0001
                                                                                                                      evaluation
                                                                                                       1r: 0.0001
episode: 911
               score: 1.0
                             memory length: 175972
                                                       epsilon: 0.8495734600032656
                                                                                        steps: 152
                                                                                                                      evaluation
episode: 912
               score: 2.0
                             memory length: 176171
                                                       epsilon: 0.8491794400032742
                                                                                        steps: 199
                                                                                                       lr: 0.0001
                                                                                                                       evaluatio
episode: 913
               score: 1.0
                             memory length: 176322
                                                       epsilon: 0.8488804600032807
                                                                                        steps: 151
                                                                                                       lr: 0.0001
                                                                                                                      evaluation
episode: 914
                             memory length: 176521
                                                                                        steps: 199
               score: 2.0
                                                       ensilon: 0.8484864400032892
                                                                                                       1r: 0.0001
                                                                                                                      evaluatio
episode: 915
               score: 2.0
                             memory length: 176740
                                                       epsilon: 0.8480528200032986
                                                                                        steps: 219
                                                                                                       lr: 0.0001
                                                                                                                      evaluation
episode: 916
               score: 4.0
                             memory length: 177040
                                                       epsilon: 0.8474588200033115
                                                                                        steps: 300
                                                                                                       lr: 0.0001
                                                                                                                       evaluation
episode: 917
               score: 3.0
                             memory length: 177293
                                                       epsilon: 0.8469578800033224
                                                                                        steps: 253
                                                                                                       lr: 0.0001
                                                                                                                      evaluation
episode: 918
               score: 0.0
                             memory length: 177416
                                                       epsilon: 0.8467143400033277
                                                                                        steps: 123
                                                                                                       lr: 0.0001
                                                                                                                      evaluation
episode: 919
               score: 2.0
                             memory length: 177635
                                                       epsilon: 0.8462807200033371
                                                                                        steps: 219
                                                                                                       lr: 0.0001
                                                                                                                       evaluation
```

```
score: 6.0
                             memory length: 177990
                                                       epsilon: 0.8455//8200033524
                                                                                                       1r: 0.0001
                                                                                                                       evaluati
episode: 920
                                                                                        steps: 355
episode: 921
                score: 3.0
                             memory length: 178236
                                                       epsilon: 0.8450907400033629
                                                                                                       lr: 0.0001
                                                                                                                       evaluatio
                                                                                        steps: 246
episode: 922
                score: 1.0
                             memory length: 178408
                                                       epsilon: 0.8447501800033703
                                                                                        steps: 172
                                                                                                       lr: 0.0001
                                                                                                                       evaluation
episode: 923
                score: 0.0
                             memory length: 178531
                                                       epsilon: 0.8445066400033756
                                                                                        steps: 123
                                                                                                       lr: 0.0001
                                                                                                                       evaluation
                score: 2.0
episode: 924
                             memory length: 178751
                                                       epsilon: 0.8440710400033851
                                                                                        steps: 220
                                                                                                       lr: 0.0001
                                                                                                                       evaluati
episode: 925
                score: 2.0
                             memory length: 178951
                                                       epsilon: 0.8436750400033937
                                                                                        steps: 200
                                                                                                       lr: 0.0001
                                                                                                                       evaluation
episode: 926
                score: 1.0
                             memory length: 179103
                                                       epsilon: 0.8433740800034002
                                                                                        steps: 152
                                                                                                       lr: 0.0001
                                                                                                                       evaluation
episode: 927
                score: 3.0
                             memory length: 179350
                                                       epsilon: 0.8428850200034108
                                                                                        steps: 247
                                                                                                       lr: 0.0001
                                                                                                                       evaluation
                score: 2.0
                             memory length: 179567
                                                       ensilon: 0.8424553600034201
                                                                                                       1r: 0.0001
episode: 928
                                                                                        steps: 217
                                                                                                                       evaluation
episode: 929
                score: 5.0
                             memory length: 179934
                                                       epsilon: 0.8417287000034359
                                                                                        steps: 367
                                                                                                       lr: 0.0001
                                                                                                                       evaluation
episode: 930
                score: 1.0
                             memory length: 180107
                                                       epsilon: 0.8413861600034434
                                                                                        steps: 173
                                                                                                       lr: 0.0001
                                                                                                                       evaluation
episode: 931
                score: 3.0
                             memory length: 180359
                                                       epsilon: 0.8408872000034542
                                                                                                       lr: 0.0001
                                                                                        steps: 252
                                                                                                                       evaluatio
episode: 932
                score: 4.0
                             memory length: 180638
                                                       epsilon: 0.8403347800034662
                                                                                        steps: 279
                                                                                                       1r: 0.0001
                                                                                                                       evaluation
                                                       epsilon: 0.8399783800034739
episode: 933
                score: 2.0
                             memory length: 180818
                                                                                        steps: 180
                                                                                                       lr: 0.0001
                                                                                                                       evaluati
                score: 2.0
episode: 934
                             memory length: 181017
                                                       epsilon: 0.8395843600034825
                                                                                                       lr: 0.0001
                                                                                        steps: 199
                                                                                                                       evaluati
                             memory length: 181141
episode: 935
                score: 0.0
                                                       epsilon: 0.8393388400034878
                                                                                        steps: 124
                                                                                                       lr: 0.0001
                                                                                                                       evaluatio
                score: 4.0
                                                       epsilon: 0.8387686000035002
episode: 936
                             memory length: 181429
                                                                                        steps: 288
                                                                                                       lr: 0.0001
                                                                                                                       evaluatio
episode: 937
                score: 2.0
                             memory length: 181650
                                                       epsilon: 0.8383310200035097
                                                                                        steps: 221
                                                                                                       lr: 0.0001
                                                                                                                       evaluation
                             memory length: 181774
episode: 938
                score: 0.0
                                                       epsilon: 0.838085500003515
                                                                                       steps: 124
                                                                                                      lr: 0.0001
                                                                                                                      evaluation
episode: 939
                score: 3.0
                             memory length: 182021
                                                       epsilon: 0.8375964400035256
                                                                                        steps: 247
                                                                                                       1r: 0.0001
                                                                                                                       evaluation
                             memory length: 182241
                                                                                                       lr: 0.0001
episode: 940
                score: 2.0
                                                       epsilon: 0.8371608400035351
                                                                                        steps: 220
                                                                                                                       evaluation
                score: 4.0
episode: 941
                             memory length: 182535
                                                       epsilon: 0.8365787200035477
                                                                                        steps: 294
                                                                                                       lr: 0.0001
                                                                                                                       evaluati
                                                       epsilon: 0.8362361800035552
episode: 942
                score: 1.0
                             memory length: 182708
                                                                                        steps: 173
                                                                                                       1r: 0.0001
                                                                                                                       evaluation
episode: 943
                score: 0.0
                             memory length: 182831
                                                       epsilon: 0.8359926400035604
                                                                                        steps: 123
                                                                                                       lr: 0.0001
                                                                                                                       evaluati
episode: 944
                score: 1.0
                             memory length: 182983
                                                       epsilon: 0.835691680003567
                                                                                       steps: 152
                                                                                                      lr: 0.0001
                                                                                                                      evaluatio:
episode: 945
                             memory length: 183153
                                                       epsilon: 0.8353550800035743
                                                                                        steps: 170
                                                                                                       lr: 0.0001
                                                                                                                       evaluatio
                score: 1.0
episode: 946
                score: 1.0
                             memory length: 183322
                                                       epsilon: 0.8350204600035815
                                                                                        steps: 169
                                                                                                       lr: 0.0001
                                                                                                                       evaluation
episode: 947
                score: 9.0
                             memory length: 183684
                                                       epsilon: 0.8343037000035971
                                                                                        steps: 362
                                                                                                       lr: 0.0001
                                                                                                                       evaluation
episode: 948
                score: 2.0
                             memory length: 183885
                                                       epsilon: 0.8339057200036057
                                                                                        steps: 201
                                                                                                       lr: 0.0001
                                                                                                                       evaluatio
episode: 949
                score: 4.0
                             memory length: 184182
                                                       epsilon: 0.8333176600036185
                                                                                        steps: 297
                                                                                                       lr: 0.0001
                                                                                                                       evaluation
episode: 950
                score: 5.0
                             memory length: 184491
                                                       epsilon: 0.8327058400036318
                                                                                        steps: 309
                                                                                                       lr: 0.0001
                                                                                                                       evaluatio
episode: 951
                score: 1.0
                             memory length: 184663
                                                       epsilon: 0.8323652800036392
                                                                                        steps: 172
                                                                                                       lr: 0.0001
                                                                                                                       evaluation
                             memory length: 184881
episode: 952
                score: 2.0
                                                       epsilon: 0.8319336400036486
                                                                                                       lr: 0.0001
                                                                                                                       evaluatio
                                                                                        steps: 218
                                                       epsilon: 0.831222820003664
episode: 953
                score: 5.0
                             memory length: 185240
                                                                                       steps: 359
                                                                                                      lr: 0.0001
                                                                                                                      evaluatio:
episode: 954
                score: 1.0
                             memory length: 185409
                                                       epsilon: 0.8308882000036713
                                                                                        steps: 169
                                                                                                       lr: 0.0001
                                                                                                                       evaluation
episode: 955
                score: 4.0
                             memory length: 185687
                                                       epsilon: 0.8303377600036832
                                                                                        steps: 278
                                                                                                       lr: 0.0001
                                                                                                                       evaluatio
episode: 956
                score: 2.0
                             memory length: 185886
                                                       epsilon: 0.8299437400036918
                                                                                        steps: 199
                                                                                                       1r: 0.0001
                                                                                                                       evaluation
episode: 957
                             memory length: 186135
                                                       epsilon: 0.8294507200037025
                                                                                                       lr: 0.0001
                score: 3.0
                                                                                        steps: 249
                                                                                                                       evaluation
                                                                                                       lr: 0.0001
episode: 958
                score: 3.0
                             memory length: 186362
                                                       epsilon: 0.8290012600037122
                                                                                        steps: 227
                                                                                                                       evaluation
episode: 959
                score: 3.0
                                                                                                       lr: 0.0001
                             memory length: 186588
                                                       epsilon: 0.8285537800037219
                                                                                        steps: 226
                                                                                                                       evaluation
episode: 960
                score: 2.0
                             memory length: 186786
                                                       epsilon: 0.8281617400037304
                                                                                        steps: 198
                                                                                                       lr: 0.0001
                                                                                                                       evaluation
episode: 961
                score: 3.0
                             memory length: 187014
                                                       epsilon: 0.8277103000037402
                                                                                        steps: 228
                                                                                                       lr: 0.0001
                                                                                                                       evaluation
episode: 962
                score: 2.0
                                                       epsilon: 0.8272786600037496
                                                                                                       lr: 0.0001
                             memory length: 187232
                                                                                        steps: 218
                                                                                                                       evaluatio
episode: 963
                score: 2.0
                             memory length: 187431
                                                       epsilon: 0.8268846400037582
                                                                                        steps: 199
                                                                                                       1r: 0.0001
                                                                                                                       evaluation
episode: 964
                score: 4.0
                             memory length: 187676
                                                       epsilon: 0.8263995400037687
                                                                                        steps: 245
                                                                                                       lr: 0.0001
                                                                                                                       evaluation
                score: 4.0
                                                                                                                       evaluati
episode: 965
                             memory length: 187951
                                                       epsilon: 0.8258550400037805
                                                                                        steps: 275
                                                                                                       lr: 0.0001
                             memory length: 188132
episode: 966
                score: 2.0
                                                       epsilon: 0.8254966600037883
                                                                                        steps: 181
                                                                                                       lr: 0.0001
                                                                                                                       evaluatio
episode: 967
                score: 2.0
                             memory length: 188333
                                                       epsilon: 0.8250986800037969
                                                                                        steps: 201
                                                                                                       lr: 0.0001
                                                                                                                       evaluatio
episode: 968
                score: 3.0
                             memory length: 188564
                                                       epsilon: 0.8246413000038069
                                                                                        steps: 231
                                                                                                       lr: 0.0001
                                                                                                                       evaluation
                             memory length: 188794
episode: 969
                                                       ensilon: 0.8241859000038168
                                                                                                       1r: 0.0001
                                                                                                                       evaluatio
                score: 3.0
                                                                                        steps: 230
episode: 970
                score: 2.0
                             memory length: 188974
                                                       epsilon: 0.8238295000038245
                                                                                        steps: 180
                                                                                                       lr: 0.0001
                                                                                                                       evaluation
episode: 971
                             memory length: 189194
                score: 2.0
                                                       epsilon: 0.823393900003834
                                                                                       steps: 220
                                                                                                      lr: 0.0001
                                                                                                                      evaluation
episode: 972
                score: 3.0
                             memory length: 189460
                                                       epsilon: 0.8228672200038454
                                                                                        steps: 266
                                                                                                       lr: 0.0001
                                                                                                                       evaluation
episode: 973
                score: 3.0
                             memory length: 189707
                                                       epsilon: 0.822378160003856
                                                                                       steps: 247
                                                                                                      1r: 0.0001
                                                                                                                      evaluation
                                                       epsilon: 0.8218435600038676
episode: 974
                score: 3.0
                             memory length: 189977
                                                                                        steps: 270
                                                                                                       lr: 0.0001
                                                                                                                       evaluation
episode: 975
                score: 3.0
                             memory length: 190224
                                                       epsilon: 0.8213545000038782
                                                                                        steps: 247
                                                                                                       lr: 0.0001
                                                                                                                       evaluation
episode: 976
                score: 4.0
                             memory length: 190503
                                                                                        steps: 279
                                                                                                       lr: 0.0001
                                                       epsilon: 0.8208020800038902
                                                                                                                       evaluatio
episode: 977
                                                       epsilon: 0.8204080600038988
                score: 2.0
                             memory length: 190702
                                                                                        steps: 199
                                                                                                       1r: 0.0001
                                                                                                                       evaluation
episode: 978
                score: 4.0
                             memory length: 190980
                                                       epsilon: 0.8198576200039107
                                                                                        steps: 278
                                                                                                       lr: 0.0001
                                                                                                                       evaluation
episode: 979
                score: 5.0
                             memory length: 191306
                                                       epsilon: 0.8192121400039247
                                                                                        steps: 326
                                                                                                       lr: 0.0001
                                                                                                                       evaluation
episode: 980
                score: 5.0
                             memory length: 191635
                                                       epsilon: 0.8185607200039389
                                                                                        steps: 329
                                                                                                       lr: 0.0001
                                                                                                                       evaluatio
episode: 981
                score: 10.0
                              memory length: 192103
                                                        epsilon: 0.817634080003959
                                                                                                       lr: 0.0001
                                                                                        steps: 468
                                                                                                                       evaluation
episode: 982
                score: 1.0
                             memory length: 192272
                                                       epsilon: 0.8172994600039662
                                                                                        steps: 169
                                                                                                       lr: 0.0001
                                                                                                                       evaluation
episode: 983
                             memory length: 192570
                                                                                                       1r: 0.0001
                                                                                                                       evaluatio
                score: 4.0
                                                       ensilon: 0.8167094200039791
                                                                                        steps: 298
episode: 984
                score: 5.0
                             memory length: 192897
                                                       epsilon: 0.8160619600039931
                                                                                        steps: 327
                                                                                                       lr: 0.0001
                                                                                                                       evaluation
episode: 985
                score: 1.0
                             memory length: 193049
                                                       epsilon: 0.8157610000039996
                                                                                        steps: 152
                                                                                                       lr: 0.0001
                                                                                                                       evaluation
episode: 986
                score: 3.0
                             memory length: 193295
                                                       epsilon: 0.8152739200040102
                                                                                        steps: 246
                                                                                                       lr: 0.0001
                                                                                                                       evaluatio
episode: 987
                                                       epsilon: 0.81482446000402
                score: 3.0
                             memory length: 193522
                                                                                      steps: 227
                                                                                                     1r: 0.0001
                                                                                                                     evaluation
episode: 988
                             memory length: 193750
                                                       epsilon: 0.8143730200040298
                                                                                                       lr: 0.0001
                score: 3.0
                                                                                        steps: 228
                                                                                                                       evaluation
episode: 989
                score: 6.0
                             memory length: 194119
                                                       epsilon: 0.8136424000040456
                                                                                        steps: 369
                                                                                                       lr: 0.0001
                                                                                                                       evaluati
episode: 990
                                                       epsilon: 0.8128622800040626
                                                                                                       lr: 0.0001
                                                                                                                       evaluatio
                score: 6.0
                             memory length: 194513
                                                                                        steps: 394
episode: 991
                score: 4.0
                             memory length: 194766
                                                       epsilon: 0.8123613400040735
                                                                                        steps: 253
                                                                                                       lr: 0.0001
                                                                                                                       evaluation
episode: 992
                score: 2.0
                             memory length: 194967
                                                       epsilon: 0.8119633600040821
                                                                                        steps: 201
                                                                                                       lr: 0.0001
                                                                                                                       evaluation
episode: 993
                score: 3.0
                             memory length: 195217
                                                       epsilon: 0.8114683600040928
                                                                                        steps: 250
                                                                                                       lr: 0.0001
                                                                                                                       evaluatio
episode: 994
                score: 1.0
                             memory length: 195390
                                                       epsilon: 0.8111258200041003
                                                                                        steps: 173
                                                                                                       lr: 0.0001
                                                                                                                       evaluation
episode: 995
                score: 2.0
                             memory length: 195590
                                                       epsilon: 0.8107298200041089
                                                                                        steps: 200
                                                                                                       lr: 0.0001
                                                                                                                       evaluation
episode: 996
                score: 2.0
                             memory length: 195809
                                                       epsilon: 0.8102962000041183
                                                                                        steps: 219
                                                                                                       lr: 0.0001
                                                                                                                       evaluati
episode: 997
                score: 3.0
                             memory length: 196019
                                                       epsilon: 0.8098804000041273
                                                                                        steps: 210
                                                                                                       1r: 0.0001
                                                                                                                       evaluation
                                                       epsilon: 0.8093339200041392
episode: 998
                score: 4.0
                             memory length: 196295
                                                                                        steps: 276
                                                                                                       lr: 0.0001
                                                                                                                       evaluation
episode: 999
                score: 4.0
                             memory length: 196607
                                                       epsilon: 0.8087161600041526
                                                                                        steps: 312
                                                                                                       lr: 0.0001
                                                                                                                       evaluation
episode: 1000
                 score: 5.0
                              memory length: 196931
                                                        ensilon: 0.8080746400041665
                                                                                         steps: 324
                                                                                                        1r: 0.0001
                                                                                                                        evaluat
episode: 1001
                                                        epsilon: 0.8074826200041794
                 score: 4.0
                              memory length: 197230
                                                                                         steps: 299
                                                                                                        lr: 0.0001
                                                                                                                        evaluat
episode: 1002
                 score: 1.0
                               memory length: 197382
                                                        epsilon: 0.8071816600041859
                                                                                         steps: 152
                                                                                                        lr: 0.0001
                                                                                                                        evaluat
episode: 1003
                              memory length: 197631
                                                        epsilon: 0.8066886400041966
                                                                                                        lr: 0.0001
                                                                                                                        evaluat
                 score: 3.0
                                                                                         steps: 249
episode: 1004
                 score: 2.0
                              memory length: 197830
                                                        epsilon: 0.8062946200042052
                                                                                         steps: 199
                                                                                                        1r: 0.0001
                                                                                                                        evaluat
```

```
epsilon: 0.8058649600042145
episode: 1005
                score: 2.0
                              memory length: 198047
                                                                                         steps: 217
                                                                                                       lr: 0.0001
                                                                                                                       evaluat
episode: 1006
                score: 2.0
                              memory length: 198249
                                                        epsilon: 0.8054650000042232
                                                                                         steps: 202
                                                                                                       lr: 0.0001
                                                                                                                       evaluat
                              memory length: 198517
                                                                                         steps: 268
                                                                                                       lr: 0.0001
                                                                                                                       evaluat.
episode: 1007
                score: 3.0
                                                        epsilon: 0.8049343600042347
                              memory length: 198785
episode: 1008
                score: 3.0
                                                        epsilon: 0.8044037200042462
                                                                                         steps: 268
                                                                                                       lr: 0.0001
                                                                                                                       evaluat
                                                                                                       lr: 0.0001
episode: 1009
                score: 6.0
                              memory length: 199143
                                                        epsilon: 0.8036948800042616
                                                                                         steps: 358
                                                                                                                       evaluat
episode: 1010
                score: 4.0
                              memory length: 199419
                                                                                         steps: 276
                                                                                                       lr: 0.0001
                                                                                                                       evaluat
                                                        epsilon: 0.8031484000042735
                                                        epsilon: 0.8027900200042812
episode: 1011
                score: 2.0
                              memory length: 199600
                                                                                         steps: 181
                                                                                                       1r: 0.0001
                                                                                                                       evaluat
episode: 1012
                score: 4.0
                              memory length: 199878
                                                        epsilon: 0.8022395800042932
                                                                                         steps: 278
                                                                                                       lr: 0.0001
                                                                                                                       evaluat
episode: 1013
                score: 6.0
                              memory length: 200272
                                                        epsilon: 0.8014594600043101
                                                                                         steps: 394
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
                                                                                         steps: 325
episode: 1014
                score: 5.0
                              memory length: 200597
                                                        ensilon: 0.8008159600043241
                                                                                                       1r: 4e-05
                                                                                                                      evaluation
                              memory length: 200824
                                                        epsilon: 0.8003665000043338
episode: 1015
                score: 3.0
                                                                                         steps: 227
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1016
                score: 2.0
                              memory length: 201026
                                                        epsilon: 0.7999665400043425
                                                                                         steps: 202
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
                score: 4.0
episode: 1017
                              memory length: 201303
                                                        epsilon: 0.7994180800043544
                                                                                         steps: 277
                                                                                                       lr: 4e-05
                                                                                                                      evaluatio
                                                        epsilon: 0.7991725600043598
episode: 1018
                score: 0.0
                              memory length: 201427
                                                                                         steps: 124
                                                                                                       1r: 4e-05
                                                                                                                      evaluation
episode: 1019
                score: 9.0
                              memory length: 201930
                                                        epsilon: 0.7981766200043814
                                                                                         steps: 503
                                                                                                       lr: 4e-05
                                                                                                                      evaluati
                score: 1.0
episode: 1020
                              memory length: 202102
                                                        epsilon: 0.7978360600043888
                                                                                         steps: 172
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1021
                              memory length: 202328
                                                        epsilon: 0.7973885800043985
                                                                                         steps: 226
                                                                                                       lr: 4e-05
                                                                                                                      evaluatio
                score: 3.0
episode: 1022
                score: 4.0
                              memory length: 202629
                                                        epsilon: 0.7967926000044114
                                                                                         steps: 301
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1023
                score: 0.0
                              memory length: 202753
                                                        epsilon: 0.7965470800044168
                                                                                         steps: 124
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
                score: 5.0
episode: 1024
                              memory length: 203098
                                                        epsilon: 0.7958639800044316
                                                                                         steps: 345
                                                                                                       lr: 4e-05
                                                                                                                      evaluati
episode: 1025
                score: 2.0
                              memory length: 203297
                                                        epsilon: 0.7954699600044401
                                                                                         steps: 199
                                                                                                       1r: 4e-05
                                                                                                                      evaluation
episode: 1026
                                                        epsilon: 0.7950759400044487
                                                                                                       lr: 4e-05
                score: 2.0
                              memory length: 203496
                                                                                         steps: 199
                                                                                                                      evaluation
episode: 1027
                score: 1.0
                              memory length: 203648
                                                        epsilon: 0.7947749800044552
                                                                                         steps: 152
                                                                                                       lr: 4e-05
                                                                                                                      evaluati
episode: 1028
                score: 3.0
                              memory length: 203898
                                                        epsilon: 0.794279980004466
                                                                                        steps: 250
                                                                                                       1r: 4e-05
                                                                                                                     evaluation
                score: 2.0
                                                        epsilon: 0.7938483400044754
episode: 1029
                              memory length: 204116
                                                                                         steps: 218
                                                                                                       lr: 4e-05
                                                                                                                      evaluatio
episode: 1030
                score: 0.0
                              memory length: 204240
                                                        epsilon: 0.7936028200044807
                                                                                         steps: 124
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1031
                score: 4.0
                              memory length: 204516
                                                        epsilon: 0.7930563400044925
                                                                                         steps: 276
                                                                                                       1r: 4e-05
                                                                                                                      evaluatio
                                                        epsilon: 0.7927197400044999
episode: 1032
                score: 1.0
                              memory length: 204686
                                                                                         steps: 170
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1033
                score: 0.0
                              memory length: 204809
                                                        epsilon: 0.7924762000045051
                                                                                         steps: 123
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
                score: 2.0
                                                        epsilon: 0.7920366400045147
episode: 1034
                              memory length: 205031
                                                                                         steps: 222
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1035
                              memory length: 205155
                                                                                                     lr: 4e-05
                score: 0.0
                                                        epsilon: 0.79179112000452
                                                                                      steps: 124
                                                                                                                    evaluation
episode: 1036
                score: 4.0
                              memory length: 205412
                                                        epsilon: 0.7912822600045311
                                                                                         steps: 257
                                                                                                       lr: 4e-05
                                                                                                                      evaluatio
episode: 1037
                score: 2.0
                              memory length: 205594
                                                        epsilon: 0.7909219000045389
                                                                                         steps: 182
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1038
                score: 3.0
                              memory length: 205843
                                                        epsilon: 0.7904288800045496
                                                                                         steps: 249
                                                                                                       lr: 4e-05
                                                                                                                      evaluatio
episode: 1039
                score: 4.0
                              memory length: 206143
                                                        epsilon: 0.7898348800045625
                                                                                         steps: 300
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1040
                score: 4.0
                              memory length: 206461
                                                        epsilon: 0.7892052400045761
                                                                                         steps: 318
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
                                                                                                                      evaluati
episode: 1041
                score: 3.0
                              memory length: 206708
                                                        epsilon: 0.7887161800045868
                                                                                         steps: 247
                                                                                                       lr: 4e-05
                                                        epsilon: 0.7883221600045953
episode: 1042
                score: 2.0
                              memory length: 206907
                                                                                         steps: 199
                                                                                                       1r: 4e-05
                                                                                                                      evaluation
episode: 1043
                score: 0.0
                              memory length: 207031
                                                        epsilon: 0.7880766400046006
                                                                                         steps: 124
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1044
                score: 6.0
                              memory length: 207374
                                                        epsilon: 0.7873975000046154
                                                                                         steps: 343
                                                                                                       lr: 4e-05
                                                                                                                      evaluati
                                                        epsilon: 0.786908440004626
                                                                                                       1r: 4e-05
episode: 1045
                score: 3.0
                              memory length: 207621
                                                                                        steps: 247
                                                                                                                     evaluation
                                                        epsilon: 0.786449080004636
episode: 1046
                score: 3.0
                              memory length: 207853
                                                                                        steps: 232
                                                                                                       lr: 4e-05
                                                                                                                     evaluation
episode: 1047
                score: 2.0
                              memory length: 208035
                                                        epsilon: 0.7860887200046438
                                                                                         steps: 182
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1048
                score: 1.0
                              memory length: 208186
                                                        epsilon: 0.7857897400046503
                                                                                         steps: 151
                                                                                                       lr: 4e-05
                                                                                                                      evaluatio
episode: 1049
                score: 4.0
                              memory length: 208466
                                                        epsilon: 0.7852353400046623
                                                                                         steps: 280
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
                                                                                                       lr: 4e-05
episode: 1050
                score: 5.0
                              memory length: 208770
                                                        epsilon: 0.7846334200046754
                                                                                         steps: 304
                                                                                                                      evaluation
episode: 1051
                score: 4.0
                              memory length: 209064
                                                        epsilon: 0.784051300004688
                                                                                        steps: 294
                                                                                                       lr: 4e-05
                                                                                                                     evaluatio:
episode: 1052
                score: 6.0
                              memory length: 209387
                                                        epsilon: 0.7834117600047019
                                                                                         steps: 323
                                                                                                       lr: 4e-05
                                                                                                                      evaluatio
episode: 1053
                score: 8.0
                              memory length: 209817
                                                        epsilon: 0.7825603600047204
                                                                                         steps: 430
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1054
                score: 5.0
                              memory length: 210147
                                                        epsilon: 0.7819069600047346
                                                                                         steps: 330
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
                score: 2.0
                                                                                                                      evaluati
episode: 1055
                              memory length: 210346
                                                        epsilon: 0.7815129400047431
                                                                                         steps: 199
                                                                                                       lr: 4e-05
episode: 1056
                score: 2.0
                              memory length: 210567
                                                        epsilon: 0.7810753600047526
                                                                                         steps: 221
                                                                                                       1r: 4e-05
                                                                                                                      evaluation
episode: 1057
                score: 3.0
                              memory length: 210812
                                                        epsilon: 0.7805902600047632
                                                                                         steps: 245
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1058
                              memory length: 211039
                                                        epsilon: 0.7801408000047729
                                                                                         steps: 227
                                                                                                       lr: 4e-05
                                                                                                                      evaluati
                score: 3.0
                                                        epsilon: 0.779629960004784
episode: 1059
                score: 4.0
                              memory length: 211297
                                                                                        steps: 258
                                                                                                       1r: 4e-05
                                                                                                                     evaluation
episode: 1060
                score: 3.0
                              memory length: 211510
                                                        epsilon: 0.7792082200047932
                                                                                         steps: 213
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1061
                score: 2.0
                              memory length: 211709
                                                        epsilon: 0.7788142000048017
                                                                                                       lr: 4e-05
                                                                                                                      evaluati
                                                                                         steps: 199
                              memory length: 212111
                                                        epsilon: 0.778018240004819
                                                                                        steps: 402
                                                                                                       lr: 4e-05
episode: 1062
                score: 6.0
                                                                                                                     evaluation
episode: 1063
                score: 2.0
                              memory length: 212329
                                                        epsilon: 0.7775866000048284
                                                                                         steps: 218
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1064
                score: 1.0
                              memory length: 212499
                                                        epsilon: 0.7772500000048357
                                                                                         steps: 170
                                                                                                       lr: 4e-05
                                                                                                                      evaluati
episode: 1065
                score: 5.0
                              memory length: 212779
                                                        epsilon: 0.7766956000048477
                                                                                         steps: 280
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1066
                score: 4.0
                              memory length: 213055
                                                        epsilon: 0.7761491200048596
                                                                                         steps: 276
                                                                                                       1r: 4e-05
                                                                                                                      evaluation
episode: 1067
                score: 4.0
                              memory length: 213353
                                                        epsilon: 0.7755590800048724
                                                                                         steps: 298
                                                                                                       lr: 4e-05
                                                                                                                      evaluatio
episode: 1068
                score: 4.0
                              memory length: 213633
                                                        epsilon: 0.7750046800048844
                                                                                         steps: 280
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
                              memory length: 213862
                                                                                                       lr: 4e-05
episode: 1069
                score: 3.0
                                                        epsilon: 0.7745512600048943
                                                                                         steps: 229
                                                                                                                      evaluatio
                              memory length: 214161
episode: 1070
                score: 4.0
                                                        epsilon: 0.7739592400049071
                                                                                         steps: 299
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1071
                score: 1.0
                              memory length: 214332
                                                        epsilon: 0.7736206600049145
                                                                                         steps: 171
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1072
                score: 3.0
                              memory length: 214558
                                                        epsilon: 0.7731731800049242
                                                                                         steps: 226
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
                                                        epsilon: 0.772626700004936
episode: 1073
                score: 4.0
                              memory length: 214834
                                                                                        steps: 276
                                                                                                       1r: 4e-05
                                                                                                                     evaluation
episode: 1074
                score: 1.0
                              memory length: 215004
                                                        epsilon: 0.7722901000049434
                                                                                         steps: 170
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1075
                score: 0.0
                              memory length: 215127
                                                        epsilon: 0.7720465600049486
                                                                                         steps: 123
                                                                                                       lr: 4e-05
                                                                                                                      evaluati
episode: 1076
                score: 10.0
                                                         epsilon: 0.7712169400049667
                                                                                                        1r: 4e-05
                               memory length: 215546
                                                                                         steps: 419
                                                                                                                       evaluat.
episode: 1077
                score: 9.0
                              memory length: 216022
                                                        epsilon: 0.7702744600049871
                                                                                         steps: 476
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1078
                score: 3.0
                              memory length: 216249
                                                        epsilon: 0.7698250000049969
                                                                                         steps: 227
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1079
                score: 3.0
                              memory length: 216476
                                                        epsilon: 0.7693755400050066
                                                                                         steps: 227
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1080
                score: 4.0
                              memory length: 216752
                                                        epsilon: 0.7688290600050185
                                                                                         steps: 276
                                                                                                       1r: 4e-05
                                                                                                                      evaluation
                score: 4.0
                              memory length: 217032
                                                                                                       lr: 4e-05
episode: 1081
                                                        epsilon: 0.7682746600050305
                                                                                         steps: 280
                                                                                                                      evaluati
episode: 1082
                score: 1.0
                              memory length: 217184
                                                        epsilon: 0.7679737000050371
                                                                                         steps: 152
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1083
                              memory length: 217383
                                                        epsilon: 0.7675796800050456
                                                                                                       1r: 4e-05
                                                                                                                      evaluatio
                score: 2.0
                                                                                         steps: 199
episode: 1084
                score: 2.0
                              memory length: 217601
                                                        epsilon: 0.767148040005055
                                                                                        steps: 218
                                                                                                       lr: 4e-05
                                                                                                                     evaluation
episode: 1085
                score: 2.0
                              memory length: 217818
                                                        epsilon: 0.7667183800050643
                                                                                         steps: 217
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1086
                score: 4.0
                              memory length: 218114
                                                        ensilon: 0.766132300005077
                                                                                        steps: 296
                                                                                                       1r: 4e-05
                                                                                                                     evaluation
episode: 1087
                score: 4.0
                              memory length: 218389
                                                        epsilon: 0.7655878000050889
                                                                                         steps: 275
                                                                                                       1r: 4e-05
                                                                                                                      evaluation
                                                                                                       lr: 4e-05
episode: 1088
                score: 6.0
                              memory length: 218766
                                                        epsilon: 0.7648413400051051
                                                                                         steps: 377
                                                                                                                      evaluation
                                                        epsilon: 0.7645403800051116
                                                                                                       lr: 4e-05
episode: 1089
                                                                                                                      evaluation
                score: 1.0
                              memory length: 218918
                                                                                         steps: 152
```

```
episode: 1090
                score: 1.0
                              memory length: 219089
                                                       epsilon: 0.764201800005119
                                                                                       steps: 171
                                                                                                      lr: 4e-05
                                                                                                                     evaluation
                                                        epsilon: 0.7638454000051267
episode: 1091
                score: 2.0
                              memory length: 219269
                                                                                        steps: 180
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1092
                score: 6.0
                              memory length: 219636
                                                        epsilon: 0.7631187400051425
                                                                                         steps: 367
                                                                                                       lr: 4e-05
                                                                                                                      evaluati
episode: 1093
                score: 2.0
                              memory length: 219857
                                                        epsilon: 0.762681160005152
                                                                                       steps: 221
                                                                                                      lr: 4e-05
                                                                                                                     evaluatio:
                                                                                                       lr: 4e-05
episode: 1094
                score: 0.0
                              memory length: 219980
                                                        epsilon: 0.7624376200051572
                                                                                        steps: 123
                                                                                                                      evaluation
                                                                                         steps: 351
episode: 1095
                score: 5.0
                              memory length: 220331
                                                        epsilon: 0.7617426400051723
                                                                                                       lr: 4e-05
                                                                                                                      evaluati
episode: 1096
                score: 6.0
                              memory length: 220723
                                                        epsilon: 0.7609664800051892
                                                                                        steps: 392
                                                                                                       lr: 4e-05
                                                                                                                      evaluati
episode: 1097
                score: 3.0
                              memory length: 220968
                                                        ensilon: 0.7604813800051997
                                                                                        steps: 245
                                                                                                       1r: 4e-05
                                                                                                                      evaluation
                score: 1.0
                                                                                                                      evaluatio
episode: 1098
                              memory length: 221120
                                                        epsilon: 0.7601804200052062
                                                                                         steps: 152
                                                                                                       lr: 4e-05
episode: 1099
                score: 7.0
                              memory length: 221404
                                                        epsilon: 0.7596181000052185
                                                                                         steps: 284
                                                                                                       lr: 4e-05
                                                                                                                      evaluati
episode: 1100
                score: 6.0
                              memory length: 221750
                                                        ensilon: 0.7589330200052333
                                                                                        steps: 346
                                                                                                       1r: 4e-05
                                                                                                                      evaluatio
episode: 1101
                score: 0.0
                              memory length: 221874
                                                        epsilon: 0.7586875000052387
                                                                                         steps: 124
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
                              memory length: 222075
                                                                                                       lr: 4e-05
episode: 1102
                score: 2.0
                                                        epsilon: 0.7582895200052473
                                                                                         steps: 201
                                                                                                                      evaluation
                score: 10.0
                                                        epsilon: 0.7575945400052624
                                                                                                        lr: 4e-05
episode: 1103
                               memory length: 222426
                                                                                         steps: 351
                                                                                                                       evaluat
                                                        epsilon: 0.7571391400052723
                                                                                                       lr: 4e-05
episode: 1104
                score: 3.0
                              memory length: 222656
                                                                                         steps: 230
                                                                                                                      evaluation
episode: 1105
                score: 6.0
                              memory length: 223042
                                                        epsilon: 0.7563748600052889
                                                                                         steps: 386
                                                                                                       lr: 4e-05
                                                                                                                      evaluati
episode: 1106
                score: 4.0
                              memory length: 223321
                                                        epsilon: 0.7558224400053009
                                                                                         steps: 279
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1107
                              memory length: 223581
                                                                                                      1r: 4e-05
                score: 4.0
                                                        epsilon: 0.755307640005312
                                                                                       steps: 260
                                                                                                                     evaluation
episode: 1108
                score: 5.0
                              memory length: 223922
                                                        epsilon: 0.7546324600053267
                                                                                         steps: 341
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1109
                score: 1.0
                              memory length: 224073
                                                        epsilon: 0.7543334800053332
                                                                                         steps: 151
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
                                                                                                                      evaluati
episode: 1110
                score: 2.0
                              memory length: 224276
                                                        epsilon: 0.7539315400053419
                                                                                        steps: 203
                                                                                                       lr: 4e-05
episode: 1111
                                                        epsilon: 0.7534405000053526
                score: 3.0
                              memory length: 224524
                                                                                        steps: 248
                                                                                                       1r: 4e-05
                                                                                                                      evaluation
episode: 1112
                score: 3.0
                              memory length: 224755
                                                        epsilon: 0.7529831200053625
                                                                                         steps: 231
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1113
                score: 3.0
                              memory length: 224965
                                                        epsilon: 0.7525673200053715
                                                                                        steps: 210
                                                                                                       lr: 4e-05
                                                                                                                      evaluati
episode: 1114
                score: 8.0
                              memory length: 225402
                                                        ensilon: 0.7517020600053903
                                                                                        steps: 437
                                                                                                       1r: 4e-05
                                                                                                                      evaluation
episode: 1115
                score: 6.0
                              memory length: 225776
                                                        epsilon: 0.7509615400054064
                                                                                         steps: 374
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1116
                score: 6.0
                              memory length: 226141
                                                        epsilon: 0.7502388400054221
                                                                                         steps: 365
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1117
                score: 1.0
                              memory length: 226293
                                                        epsilon: 0.7499378800054286
                                                                                        steps: 152
                                                                                                       1r: 4e-05
                                                                                                                      evaluatio
episode: 1118
                score: 6.0
                              memory length: 226686
                                                        epsilon: 0.7491597400054455
                                                                                         steps: 393
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1119
                                                                                                       lr: 4e-05
                score: 4.0
                              memory length: 226944
                                                        epsilon: 0.7486489000054566
                                                                                         steps: 258
                                                                                                                      evaluation
                                                                                                       lr: 4e-05
                score: 5.0
                                                        epsilon: 0.7480450000054697
episode: 1120
                              memory length: 227249
                                                                                        steps: 305
                                                                                                                      evaluation
                              memory length: 227460
                                                                                         steps: 211
episode: 1121
                score: 3.0
                                                        epsilon: 0.7476272200054788
                                                                                                       1r: 4e-05
                                                                                                                      evaluatio
episode: 1122
                score: 1.0
                              memory length: 227629
                                                        epsilon: 0.747292600005486
                                                                                        steps: 169
                                                                                                      lr: 4e-05
                                                                                                                     evaluation
episode: 1123
                score: 7.0
                              memory length: 228046
                                                        epsilon: 0.746466940005504
                                                                                        steps: 417
                                                                                                      lr: 4e-05
                                                                                                                     evaluation
episode: 1124
                                                        epsilon: 0.7460749000055125
                score: 2.0
                              memory length: 228244
                                                                                        steps: 198
                                                                                                       lr: 4e-05
                                                                                                                      evaluatio
                              memory length: 228471
episode: 1125
                score: 3.0
                                                        epsilon: 0.7456254400055222
                                                                                         steps: 227
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1126
                                                        epsilon: 0.7452829000055297
                score: 1.0
                              memory length: 228644
                                                                                         steps: 173
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1127
                score: 7.0
                              memory length: 229054
                                                        epsilon: 0.7444711000055473
                                                                                        steps: 410
                                                                                                       lr: 4e-05
                                                                                                                      evaluati
episode: 1128
                                                        ensilon: 0.7441701400055538
                score: 1.0
                              memory length: 229206
                                                                                        steps: 152
                                                                                                       1r: 4e-05
                                                                                                                      evaluation
                score: 2.0
episode: 1129
                              memory length: 229407
                                                        epsilon: 0.7437721600055625
                                                                                         steps: 201
                                                                                                       lr: 4e-05
                                                                                                                      evaluatio
episode: 1130
                score: 4.0
                              memory length: 229684
                                                        epsilon: 0.7432237000055744
                                                                                        steps: 277
                                                                                                       lr: 4e-05
                                                                                                                      evaluati
episode: 1131
                score: 3.0
                              memory length: 229952
                                                        ensilon: 0.7426930600055859
                                                                                        steps: 268
                                                                                                       1r: 4e-05
                                                                                                                      evaluation
                                                        epsilon: 0.7420555000055997
episode: 1132
                score: 5.0
                              memory length: 230274
                                                                                         steps: 322
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1133
                score: 3.0
                                                                                                       lr: 4e-05
                              memory length: 230504
                                                        epsilon: 0.7416001000056096
                                                                                         steps: 230
                                                                                                                      evaluation
episode: 1134
                score: 5.0
                              memory length: 230814
                                                        epsilon: 0.7409863000056229
                                                                                        steps: 310
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1135
                score: 4.0
                              memory length: 231095
                                                        epsilon: 0.740429920005635
                                                                                        steps: 281
                                                                                                      lr: 4e-05
                                                                                                                     evaluation
episode: 1136
                score: 5.0
                              memory length: 231437
                                                        epsilon: 0.7397527600056497
                                                                                        steps: 342
                                                                                                       lr: 4e-05
                                                                                                                      evaluati
episode: 1137
                score: 0.0
                              memory length: 231561
                                                        epsilon: 0.739507240005655
                                                                                        steps: 124
                                                                                                      lr: 4e-05
                                                                                                                     evaluatio:
episode: 1138
                score: 4.0
                                                                                                       1r: 4e-05
                              memory length: 231837
                                                        epsilon: 0.7389607600056669
                                                                                        steps: 276
                                                                                                                      evaluatio
                              memory length: 232181
episode: 1139
                score: 5.0
                                                        epsilon: 0.7382796400056817
                                                                                        steps: 344
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1140
                score: 5.0
                              memory length: 232511
                                                        epsilon: 0.7376262400056959
                                                                                         steps: 330
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1141
                score: 4.0
                              memory length: 232807
                                                        epsilon: 0.7370401600057086
                                                                                        steps: 296
                                                                                                       lr: 4e-05
                                                                                                                      evaluati
                                                        epsilon: 0.7366421800057172
episode: 1142
                score: 2.0
                              memory length: 233008
                                                                                         steps: 201
                                                                                                       1r: 4e-05
                                                                                                                      evaluation
                                                                                                                      evaluati
episode: 1143
                score: 5.0
                              memory length: 233317
                                                        epsilon: 0.7360303600057305
                                                                                         steps: 309
                                                                                                       lr: 4e-05
episode: 1144
                score: 1.0
                              memory length: 233488
                                                        epsilon: 0.7356917800057379
                                                                                         steps: 171
                                                                                                       lr: 4e-05
                                                                                                                      evaluati
episode: 1145
                score: 4.0
                              memory length: 233765
                                                        ensilon: 0.7351433200057498
                                                                                                       1r: 4e-05
                                                                                        steps: 277
                                                                                                                      evaluation
episode: 1146
                score: 3.0
                              memory length: 233995
                                                        epsilon: 0.7346879200057597
                                                                                         steps: 230
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1147
                score: 1.0
                              memory length: 234147
                                                        epsilon: 0.7343869600057662
                                                                                        steps: 152
                                                                                                       lr: 4e-05
                                                                                                                      evaluati
episode: 1148
                score: 8.0
                              memory length: 234605
                                                        epsilon: 0.7334801200057859
                                                                                        steps: 458
                                                                                                       lr: 4e-05
                                                                                                                      evaluatio
episode: 1149
                score: 3.0
                              memory length: 234853
                                                        epsilon: 0.7329890800057965
                                                                                         steps: 248
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1150
                score: 5.0
                              memory length: 235179
                                                        epsilon: 0.7323436000058106
                                                                                         steps: 326
                                                                                                       lr: 4e-05
                                                                                                                      evaluati
episode: 1151
                score: 5.0
                                                        epsilon: 0.7316624800058253
                              memory length: 235523
                                                                                        steps: 344
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1152
                              memory length: 235722
                                                                                         steps: 199
                                                                                                       lr: 4e-05
                                                                                                                      evaluatio
                score: 2.0
                                                        epsilon: 0.7312684600058339
episode: 1153
                score: 4.0
                              memory length: 235987
                                                        epsilon: 0.7307437600058453
                                                                                         steps: 265
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1154
                score: 7.0
                              memory length: 236376
                                                        epsilon: 0.729973540005862
                                                                                        steps: 389
                                                                                                      lr: 4e-05
                                                                                                                     evaluation
episode: 1155
                score: 8.0
                              memory length: 236831
                                                        epsilon: 0.7290726400058816
                                                                                        steps: 455
                                                                                                       lr: 4e-05
                                                                                                                      evaluatio
episode: 1156
                score: 3.0
                              memory length: 237060
                                                        epsilon: 0.7286192200058914
                                                                                        steps: 229
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1157
                                                                                     steps: 200
                                                                                                    lr: 4e-05
                score: 2.0
                              memory length: 237260
                                                        epsilon: 0.7282232200059
                                                                                                                   evaluation
episode: 1158
                score: 3.0
                              memory length: 237509
                                                        epsilon: 0.7277302000059107
                                                                                        steps: 249
                                                                                                       lr: 4e-05
                                                                                                                      evaluati
episode: 1159
                score: 4.0
                              memory length: 237767
                                                        ensilon: 0.7272193600059218
                                                                                         steps: 258
                                                                                                       1r: 4e-05
                                                                                                                      evaluation
                                                                                                                     evaluatio:
episode: 1160
                score: 6.0
                              memory length: 238145
                                                        epsilon: 0.726470920005938
                                                                                        steps: 378
                                                                                                      lr: 4e-05
episode: 1161
                score: 4.0
                              memory length: 238406
                                                        epsilon: 0.7259541400059493
                                                                                                       lr: 4e-05
                                                                                                                      evaluati
                                                                                        steps: 261
episode: 1162
                score: 4.0
                              memory length: 238704
                                                        ensilon: 0.7253641000059621
                                                                                        steps: 298
                                                                                                       1r: 4e-05
                                                                                                                      evaluation
episode: 1163
                score: 0.0
                              memory length: 238828
                                                        epsilon: 0.7251185800059674
                                                                                         steps: 124
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1164
                score: 2.0
                              memory length: 239045
                                                        epsilon: 0.7246889200059767
                                                                                         steps: 217
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1165
                score: 7.0
                                                        epsilon: 0.7238395000059952
                              memory length: 239474
                                                                                        steps: 429
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
                                                        epsilon: 0.7230395800060125
episode: 1166
                score: 7.0
                              memory length: 239878
                                                                                         steps: 404
                                                                                                       1r: 4e-05
                                                                                                                      evaluation
                score: 5.0
                                                        epsilon: 0.7224713200060249
episode: 1167
                              memory length: 240165
                                                                                         steps: 287
                                                                                                       lr: 4e-05
                                                                                                                      evaluati
episode: 1168
                score: 3.0
                              memory length: 240414
                                                        epsilon: 0.7219783000060356
                                                                                         steps: 249
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1169
                score: 7.0
                              memory length: 240785
                                                        epsilon: 0.7212437200060515
                                                                                        steps: 371
                                                                                                       lr: 4e-05
                                                                                                                      evaluatio
episode: 1170
                score: 5.0
                              memory length: 241110
                                                        epsilon: 0.7206002200060655
                                                                                         steps: 325
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1171
                score: 4.0
                              memory length: 241404
                                                        epsilon: 0.7200181000060781
                                                                                         steps: 294
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1172
                              memory length: 241630
                                                        epsilon: 0.7195706200060878
                                                                                                       lr: 4e-05
                                                                                                                      evaluati
                score: 3.0
                                                                                         steps: 226
episode: 1173
                                                        epsilon: 0.7189607800061011
                score: 5.0
                              memory length: 241938
                                                                                         steps: 308
                                                                                                       1r: 4e-05
                                                                                                                      evaluation
                                                        epsilon: 0.7185667600061096
episode: 1174
                score: 2.0
                              memory length: 242137
                                                                                         steps: 199
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
```

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                score: 2.0
                                                        epsilon: 0.7182083800061174
episode: 1175
                              memory length: 242318
                                                                                         steps: 181
                                                                                                        lr: 4e-05
                                                                                                                      evaluation
episode: 1176
                score: 8.0
                              memory length: 242748
                                                        epsilon: 0.7173569800061359
                                                                                         steps: 430
                                                                                                        lr: 4e-05
                                                                                                                       evaluation
                              memory length: 243046
                                                        epsilon: 0.7167669400061487
episode: 1177
                score: 4.0
                                                                                         steps: 298
                                                                                                        lr: 4e-05
                                                                                                                       evaluation
episode: 1178
                score: 2.0
                              memory length: 243247
                                                        epsilon: 0.7163689600061574
                                                                                         steps: 201
                                                                                                        lr: 4e-05
                                                                                                                       evaluation
episode: 1179
                score: 5.0
                              memory length: 243575
                                                        epsilon: 0.7157195200061715
                                                                                         steps: 328
                                                                                                        lr: 4e-05
                                                                                                                       evaluatio
episode: 1180
                score: 4.0
                              memory length: 243853
                                                        epsilon: 0.7151690800061834
                                                                                         steps: 278
                                                                                                        1r: 4e-05
                                                                                                                      evaluation
                                                                                         steps: 229
episode: 1181
                              memory length: 244082
                                                        epsilon: 0.7147156600061932
                                                                                                        lr: 4e-05
                score: 3.0
                                                                                                                       evaluation
episode: 1182
                score: 2.0
                              memory length: 244280
                                                        epsilon: 0.7143236200062018
                                                                                         steps: 198
                                                                                                        lr: 4e-05
                                                                                                                       evaluati
episode: 1183
                score: 3.0
                              memory length: 244532
                                                        epsilon: 0.7138246600062126
                                                                                         steps: 252
                                                                                                        lr: 4e-05
                                                                                                                      evaluation
                score: 3.0
episode: 1184
                              memory length: 244782
                                                        epsilon: 0.7133296600062233
                                                                                         steps: 250
                                                                                                       lr: 4e-05
                                                                                                                       evaluation
episode: 1185
                score: 6.0
                              memory length: 245133
                                                        epsilon: 0.7126346800062384
                                                                                         steps: 351
                                                                                                        lr: 4e-05
                                                                                                                       evaluation
episode: 1186
                score: 3.0
                              memory length: 245383
                                                        ensilon: 0.7121396800062492
                                                                                         steps: 250
                                                                                                       1r: 4e-05
                                                                                                                      evaluation
                                                        epsilon: 0.7117080400062585
episode: 1187
                score: 2.0
                              memory length: 245601
                                                                                         steps: 218
                                                                                                       lr: 4e-05
                                                                                                                       evaluation
                score: 7.0
                                                                                                        lr: 4e-05
episode: 1188
                              memory length: 246005
                                                        epsilon: 0.7109081200062759
                                                                                         steps: 404
                                                                                                                       evaluation
episode: 1189
                score: 5.0
                              memory length: 246348
                                                        epsilon: 0.7102289800062906
                                                                                         steps: 343
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
                                                        epsilon: 0.709892380006298
                                                                                                       1r: 4e-05
episode: 1190
                score: 1.0
                              memory length: 246518
                                                                                        steps: 170
                                                                                                                      evaluation
                              memory length: 246785
episode: 1191
                                                        epsilon: 0.7093637200063094
                score: 3.0
                                                                                         steps: 267
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1192
                score: 6.0
                              memory length: 247149
                                                        epsilon: 0.7086430000063251
                                                                                         steps: 364
                                                                                                        lr: 4e-05
                                                                                                                      evaluation
episode: 1193
                              memory length: 247543
                                                                                                       lr: 4e-05
                score: 6.0
                                                        epsilon: 0.707862880006342
                                                                                        steps: 394
                                                                                                                      evaluation
episode: 1194
                score: 4.0
                              memory length: 247819
                                                        epsilon: 0.7073164000063539
                                                                                         steps: 276
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1195
                score: 7.0
                              memory length: 248188
                                                        epsilon: 0.7065857800063697
                                                                                         steps: 369
                                                                                                        lr: 4e-05
                                                                                                                       evaluation
episode: 1196
                              memory length: 248340
                                                        epsilon: 0.7062848200063763
                                                                                         steps: 152
                                                                                                        lr: 4e-05
                score: 1.0
                                                                                                                      evaluation
episode: 1197
                score: 6.0
                              memory length: 248712
                                                        epsilon: 0.7055482600063923
                                                                                                        1r: 4e-05
                                                                                         steps: 372
                                                                                                                      evaluation
episode: 1198
                score: 3.0
                              memory length: 248960
                                                        epsilon: 0.7050572200064029
                                                                                         steps: 248
                                                                                                       lr: 4e-05
                                                                                                                       evaluation
episode: 1199
                score: 3.0
                              memory length: 249189
                                                        epsilon: 0.7046038000064128
                                                                                         steps: 229
                                                                                                        lr: 4e-05
                                                                                                                       evaluati
                                                                                                       1r: 4e-05
episode: 1200
                score: 3.0
                              memory length: 249418
                                                        ensilon: 0.7041503800064226
                                                                                         steps: 229
                                                                                                                      evaluation
                score: 4.0
                                                        epsilon: 0.7035682600064352
episode: 1201
                              memory length: 249712
                                                                                         steps: 294
                                                                                                       lr: 4e-05
                                                                                                                       evaluation
episode: 1202
                score: 5.0
                              memory length: 250037
                                                        epsilon: 0.7029247600064492
                                                                                         steps: 325
                                                                                                        lr: 4e-05
                                                                                                                       evaluation
                                                                                                       lr: 4e-05
episode: 1203
                score: 5.0
                              memory length: 250310
                                                        epsilon: 0.702384220006461
                                                                                        steps: 273
                                                                                                                      evaluatio:
episode: 1204
                score: 7.0
                              memory length: 250697
                                                        epsilon: 0.7016179600064776
                                                                                         steps: 387
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1205
                score: 4.0
                              memory length: 250973
                                                        epsilon: 0.7010714800064894
                                                                                         steps: 276
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
                score: 2.0
                                                        epsilon: 0.700679440006498
                                                                                                       lr: 4e-05
episode: 1206
                              memory length: 251171
                                                                                        steps: 198
                                                                                                                      evaluatio:
                              memory length: 251399
episode: 1207
                                                        epsilon: 0.7002280000065078
                                                                                         steps: 228
                                                                                                       lr: 4e-05
                                                                                                                      evaluatio
                score: 3.0
                              memory length: 251523
episode: 1208
                score: 0.0
                                                        epsilon: 0.6999824800065131
                                                                                         steps: 124
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1209
                score: 5.0
                              memory length: 251868
                                                        epsilon: 0.6992993800065279
                                                                                         steps: 345
                                                                                                        lr: 4e-05
                                                                                                                       evaluation
episode: 1210
                score: 3.0
                              memory length: 252115
                                                        epsilon: 0.6988103200065385
                                                                                         steps: 247
                                                                                                        1r: 4e-05
                                                                                                                      evaluatio
episode: 1211
                score: 5.0
                              memory length: 252461
                                                        epsilon: 0.6981252400065534
                                                                                         steps: 346
                                                                                                        lr: 4e-05
                                                                                                                       evaluation
                score: 5.0
                                                                                         steps: 332
episode: 1212
                              memory length: 252793
                                                        epsilon: 0.6974678800065677
                                                                                                        lr: 4e-05
                                                                                                                       evaluation
episode: 1213
                score: 3.0
                              memory length: 253019
                                                        epsilon: 0.6970204000065774
                                                                                         steps: 226
                                                                                                        lr: 4e-05
                                                                                                                      evaluati
episode: 1214
                score: 6.0
                              memory length: 253380
                                                        ensilon: 0.6963056200065929
                                                                                         steps: 361
                                                                                                        1r: 4e-05
                                                                                                                      evaluation
                score: 3.0
episode: 1215
                              memory length: 253628
                                                        epsilon: 0.6958145800066036
                                                                                         steps: 248
                                                                                                       lr: 4e-05
                                                                                                                       evaluation
episode: 1216
                score: 4.0
                              memory length: 253922
                                                        epsilon: 0.6952324600066162
                                                                                         steps: 294
                                                                                                        lr: 4e-05
                                                                                                                       evaluati
episode: 1217
                score: 5.0
                              memory length: 254249
                                                        ensilon: 0.6945850000066303
                                                                                         steps: 327
                                                                                                       1r: 4e-05
                                                                                                                      evaluation
episode: 1218
                                                        epsilon: 0.6942464200066376
                score: 1.0
                              memory length: 254420
                                                                                         steps: 171
                                                                                                       lr: 4e-05
                                                                                                                       evaluation
                                                                                                        lr: 4e-05
episode: 1219
                score: 3.0
                              memory length: 254634
                                                        epsilon: 0.6938227000066468
                                                                                         steps: 214
                                                                                                                       evaluation
                                                        epsilon: 0.6935197600066534
                                                                                                       lr: 4e-05
episode: 1220
                score: 1.0
                              memory length: 254787
                                                                                         steps: 153
                                                                                                                      evaluation
                                                        epsilon: 0.692985160006665
                                                                                                       1r: 4e-05
episode: 1221
                score: 4.0
                              memory length: 255057
                                                                                        steps: 270
                                                                                                                      evaluation
                              memory length: 255373
episode: 1222
                score: 5.0
                                                        epsilon: 0.6923594800066786
                                                                                         steps: 316
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1223
                score: 6.0
                              memory length: 255712
                                                        epsilon: 0.6916882600066931
                                                                                         steps: 339
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1224
                score: 5.0
                              memory length: 256002
                                                        epsilon: 0.6911140600067056
                                                                                         steps: 290
                                                                                                       1r: 4e-05
                                                                                                                      evaluatio
                              memory length: 256351
episode: 1225
                score: 8.0
                                                        epsilon: 0.6904230400067206
                                                                                         steps: 349
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1226
                score: 8.0
                              memory length: 256756
                                                        epsilon: 0.689621140006738
                                                                                        steps: 405
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
                score: 5.0
                                                                                                       lr: 4e-05
episode: 1227
                              memory length: 257064
                                                        epsilon: 0.6890113000067513
                                                                                         steps: 308
                                                                                                                      evaluation
                score: 7.0
                                                        epsilon: 0.688191580006769
episode: 1228
                              memory length: 257478
                                                                                        steps: 414
                                                                                                       1r: 4e-05
                                                                                                                      evaluation
                score: 2.0
episode: 1229
                              memory length: 257679
                                                        epsilon: 0.6877936000067777
                                                                                         steps: 201
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1230
                score: 2.0
                              memory length: 257898
                                                        epsilon: 0.6873599800067871
                                                                                         steps: 219
                                                                                                        lr: 4e-05
                                                                                                                       evaluati
episode: 1231
                score: 9.0
                              memory length: 258390
                                                        ensilon: 0.6863858200068083
                                                                                                       1r: 4e-05
                                                                                         steps: 492
                                                                                                                      evaluation
                score: 5.0
episode: 1232
                              memory length: 258698
                                                        epsilon: 0.6857759800068215
                                                                                         steps: 308
                                                                                                       lr: 4e-05
                                                                                                                       evaluation
episode: 1233
                score: 4.0
                              memory length: 258994
                                                        epsilon: 0.6851899000068342
                                                                                         steps: 296
                                                                                                        lr: 4e-05
                                                                                                                       evaluation
episode: 1234
                score: 2.0
                              memory length: 259198
                                                        epsilon: 0.684785980006843
                                                                                        steps: 204
                                                                                                       lr: 4e-05
                                                                                                                      evaluatio:
episode: 1235
                                                        epsilon: 0.6844276000068508
                score: 2.0
                              memory length: 259379
                                                                                         steps: 181
                                                                                                       1r: 4e-05
                                                                                                                      evaluation
episode: 1236
                score: 1.0
                              memory length: 259531
                                                        epsilon: 0.6841266400068573
                                                                                         steps: 152
                                                                                                        lr: 4e-05
                                                                                                                       evaluati
episode: 1237
                score: 8.0
                              memory length: 259971
                                                        epsilon: 0.6832554400068762
                                                                                         steps: 440
                                                                                                        lr: 4e-05
                                                                                                                      evaluation
episode: 1238
                              memory length: 260279
                                                                                         steps: 308
                                                                                                        1r: 4e-05
                score: 5.0
                                                        epsilon: 0.6826456000068895
                                                                                                                      evaluation
episode: 1239
                score: 3.0
                              memory length: 260491
                                                        epsilon: 0.6822258400068986
                                                                                         steps: 212
                                                                                                        lr: 4e-05
                                                                                                                       evaluation
episode: 1240
                score: 2.0
                              memory length: 260692
                                                        epsilon: 0.6818278600069072
                                                                                         steps: 201
                                                                                                        lr: 4e-05
                                                                                                                       evaluation
episode: 1241
                score: 6.0
                              memory length: 261011
                                                        epsilon: 0.6811962400069209
                                                                                         steps: 319
                                                                                                        lr: 4e-05
                                                                                                                      evaluation
                              memory length: 261309
episode: 1242
                score: 4.0
                                                        epsilon: 0.6806062000069337
                                                                                         steps: 298
                                                                                                        lr: 4e-05
                                                                                                                       evaluation
episode: 1243
                score: 5.0
                              memory length: 261659
                                                        epsilon: 0.6799132000069488
                                                                                         steps: 350
                                                                                                        lr: 4e-05
                                                                                                                       evaluation
                score: 1.0
episode: 1244
                              memory length: 261811
                                                        epsilon: 0.6796122400069553
                                                                                         steps: 152
                                                                                                        lr: 4e-05
                                                                                                                       evaluati
episode: 1245
                                                        epsilon: 0.6791964400069643
                score: 3.0
                              memory length: 262021
                                                                                         steps: 210
                                                                                                       1r: 4e-05
                                                                                                                      evaluation
episode: 1246
                score: 7.0
                              memory length: 262398
                                                        epsilon: 0.6784499800069805
                                                                                         steps: 377
                                                                                                       lr: 4e-05
                                                                                                                       evaluation
episode: 1247
                score: 9.0
                              memory length: 262876
                                                        epsilon: 0.6775035400070011
                                                                                         steps: 478
                                                                                                        lr: 4e-05
                                                                                                                       evaluation
episode: 1248
                score: 5.0
                              memory length: 263226
                                                        ensilon: 0.6768105400070161
                                                                                         steps: 350
                                                                                                       1r: 4e-05
                                                                                                                      evaluation
                              memory length: 263619
episode: 1249
                score: 8.0
                                                        epsilon: 0.676032400007033
                                                                                        steps: 393
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1250
                score: 5.0
                              memory length: 263944
                                                        epsilon: 0.675388900007047
                                                                                        steps: 325
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
                score: 3.0
                                                        epsilon: 0.6749335000070569
episode: 1251
                              memory length: 264174
                                                                                         steps: 230
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1252
                score: 9.0
                              memory length: 264639
                                                        epsilon: 0.6740128000070769
                                                                                         steps: 465
                                                                                                       1r: 4e-05
                                                                                                                      evaluation
                score: 4.0
                              memory length: 264917
                                                                                         steps: 278
                                                                                                        lr: 4e-05
episode: 1253
                                                        epsilon: 0.6734623600070888
                                                                                                                       evaluation
episode: 1254
                score: 3.0
                              memory length: 265164
                                                        epsilon: 0.6729733000070994
                                                                                         steps: 247
                                                                                                        lr: 4e-05
                                                                                                                      evaluation
                                                                                                        lr: 4e-05
episode: 1255
                score: 5.0
                              memory length: 265460
                                                        epsilon: 0.6723872200071122
                                                                                         steps: 296
                                                                                                                      evaluatio
episode: 1256
                score: 4.0
                              memory length: 265756
                                                        epsilon: 0.6718011400071249
                                                                                         steps: 296
                                                                                                        lr: 4e-05
                                                                                                                      evaluation
episode: 1257
                score: 9.0
                              memory length: 266230
                                                        epsilon: 0.6708626200071452
                                                                                         steps: 474
                                                                                                        lr: 4e-05
                                                                                                                      evaluation
episode: 1258
                                                        epsilon: 0.670411180007155
                score: 3.0
                              memory length: 266458
                                                                                        steps: 228
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
enisode: 1259
                score: 6 0
                              memory length: 266834
                                                        engilon: 0 6696667000071712
                                                                                         ctonc. 376
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SCOLE: 0.0
                               memory rength: 200034
                                                                                                        TT: 46-02
episoue: 1200
                                                        ebatton: 0.002000/0000/1/17
                                                                                         sceps: 3/0
                                                                                                                       ечатиацт
episode: 1260
                score: 0.0
                              memory length: 266957
                                                        epsilon: 0.6694231600071765
                                                                                         steps: 123
                                                                                                        lr: 4e-05
                                                                                                                       evaluation
episode: 1261
                score: 3.0
                               memory length: 267202
                                                        epsilon: 0.668938060007187
                                                                                        steps: 245
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1262
                score: 5.0
                              memory length: 267566
                                                        epsilon: 0.6682173400072027
                                                                                         steps: 364
                                                                                                        lr: 4e-05
                                                                                                                       evaluatio
episode: 1263
                score: 1.0
                              memory length: 267718
                                                        epsilon: 0.6679163800072092
                                                                                         steps: 152
                                                                                                        1r: 4e-05
                                                                                                                       evaluation
episode: 1264
                score: 3.0
                               memory length: 267932
                                                        epsilon: 0.6674926600072184
                                                                                         steps: 214
                                                                                                        lr: 4e-05
                                                                                                                       evaluation
                                                                                                        lr: 4e-05
episode: 1265
                score: 6.0
                              memory length: 268284
                                                        epsilon: 0.6667957000072335
                                                                                         steps: 352
                                                                                                                       evaluation
episode: 1266
                score: 4.0
                              memory length: 268567
                                                        epsilon: 0.6662353600072457
                                                                                         steps: 283
                                                                                                        1r: 4e-05
                                                                                                                       evaluation
episode: 1267
                score: 3.0
                               memory length: 268798
                                                        epsilon: 0.6657779800072556
                                                                                         steps: 231
                                                                                                        lr: 4e-05
                                                                                                                       evaluation
episode: 1268
                score: 7.0
                               memory length: 269197
                                                        epsilon: 0.6649879600072728
                                                                                         steps: 399
                                                                                                        lr: 4e-05
                                                                                                                       evaluation
episode: 1269
                score: 2.0
                              memory length: 269399
                                                        epsilon: 0.6645880000072815
                                                                                         steps: 202
                                                                                                        1r: 4e-05
                                                                                                                       evaluatio
                score: 2.0
episode: 1270
                               memory length: 269582
                                                        epsilon: 0.6642256600072893
                                                                                         steps: 183
                                                                                                        lr: 4e-05
                                                                                                                       evaluation
episode: 1271
                score: 6.0
                               memory length: 269958
                                                        epsilon: 0.6634811800073055
                                                                                         steps: 376
                                                                                                        lr: 4e-05
                                                                                                                       evaluation
                score: 7.0
                                                        epsilon: 0.662677300007323
episode: 1272
                              memory length: 270364
                                                                                        steps: 406
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1273
                score: 14.0
                               memory length: 270942
                                                         epsilon: 0.6615328600073478
                                                                                          steps: 578
                                                                                                         lr: 4e-05
                                                                                                                        evaluat
episode: 1274
                                                                                                        lr: 4e-05
                score: 3.0
                               memory length: 271168
                                                        epsilon: 0.6610853800073575
                                                                                         steps: 226
                                                                                                                       evaluation
                score: 4.0
episode: 1275
                              memory length: 271435
                                                        epsilon: 0.660556720007369
                                                                                        steps: 267
                                                                                                       lr: 4e-05
                                                                                                                      evaluatio:
                                                        epsilon: 0.6601924000073769
episode: 1276
                score: 2.0
                              memory length: 271619
                                                                                         steps: 184
                                                                                                        1r: 4e-05
                                                                                                                       evaluation
                              memory length: 271924
episode: 1277
                                                        epsilon: 0.65958850000739
                score: 5.0
                                                                                       steps: 305
                                                                                                      1r: 4e-05
                                                                                                                     evaluation
episode: 1278
                score: 5.0
                               memory length: 272249
                                                        epsilon: 0.658945000007404
                                                                                        steps: 325
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1279
                score: 4.0
                              memory length: 272506
                                                        epsilon: 0.658436140007415
                                                                                        steps: 257
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1280
                score: 9.0
                              memory length: 272988
                                                        epsilon: 0.6574817800074357
                                                                                         steps: 482
                                                                                                        1r: 4e-05
                                                                                                                       evaluation
episode: 1281
                score: 5.0
                               memory length: 273298
                                                        epsilon: 0.6568679800074491
                                                                                         steps: 310
                                                                                                        lr: 4e-05
                                                                                                                       evaluation
episode: 1282
                score: 7.0
                               memory length: 273634
                                                        epsilon: 0.6562027000074635
                                                                                         steps: 336
                                                                                                        lr: 4e-05
                                                                                                                       evaluati
episode: 1283
                score: 5.0
                              memory length: 273926
                                                        epsilon: 0.655624540007476
                                                                                        steps: 292
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
                score: 5.0
                                                        epsilon: 0.6550879600074877
episode: 1284
                               memory length: 274197
                                                                                         steps: 271
                                                                                                        lr: 4e-05
                                                                                                                       evaluation
episode: 1285
                score: 4.0
                               memory length: 274496
                                                        epsilon: 0.6544959400075006
                                                                                         steps: 299
                                                                                                        lr: 4e-05
                                                                                                                       evaluati
                                                                                                        lr: 4e-05
episode: 1286
                score: 3.0
                              memory length: 274726
                                                        epsilon: 0.6540405400075104
                                                                                         steps: 230
                                                                                                                       evaluation
episode: 1287
                score: 3.0
                               memory length: 274937
                                                        epsilon: 0.6536227600075195
                                                                                         steps: 211
                                                                                                        lr: 4e-05
                                                                                                                       evaluation
episode: 1288
                score: 8.0
                               memory
                                      length: 275369
                                                        epsilon: 0.6527674000075381
                                                                                         steps: 432
                                                                                                        lr: 4e-05
                                                                                                                       evaluation
episode: 1289
                score: 4.0
                              memory length: 275668
                                                        epsilon: 0.6521753800075509
                                                                                         steps: 299
                                                                                                        lr: 4e-05
                                                                                                                       evaluation
episode: 1290
                score: 7.0
                               memory length: 276071
                                                        epsilon: 0.6513774400075683
                                                                                         steps: 403
                                                                                                        1r: 4e-05
                                                                                                                       evaluation
episode: 1291
                score: 3.0
                               memory length: 276300
                                                        epsilon: 0.6509240200075781
                                                                                         steps: 229
                                                                                                        lr: 4e-05
                                                                                                                       evaluatio
                score: 7.0
                              memory length: 276689
                                                        epsilon: 0.6501538000075948
                                                                                         steps: 389
episode: 1292
                                                                                                        lr: 4e-05
                                                                                                                       evaluation
episode: 1293
                score: 9.0
                               memory length: 277161
                                                        epsilon: 0.6492192400076151
                                                                                         steps: 472
                                                                                                        lr: 4e-05
                                                                                                                       evaluatio
episode: 1294
                score: 8.0
                              memory length: 277632
                                                        epsilon: 0.6482866600076354
                                                                                         steps: 471
                                                                                                        1r: 4e-05
                                                                                                                       evaluation
episode: 1295
                score: 5.0
                               memory length: 277976
                                                        epsilon: 0.6476055400076501
                                                                                         steps: 344
                                                                                                        lr: 4e-05
                                                                                                                       evaluation
episode: 1296
                              memory length: 278352
                                                                                                        lr: 4e-05
                                                                                                                       evaluation
                score: 6.0
                                                        epsilon: 0.6468610600076663
                                                                                         steps: 376
episode: 1297
                score: 6.0
                              memory length: 278731
                                                        epsilon: 0.6461106400076826
                                                                                         steps: 379
                                                                                                        1r: 4e-05
                                                                                                                       evaluation
episode: 1298
                 score: 2.0
                               memory length: 278930
                                                        epsilon: 0.6457166200076911
                                                                                         steps: 199
                                                                                                        lr: 4e-05
                                                                                                                       evaluation
episode: 1299
                score: 5.0
                               memory length: 279299
                                                        epsilon: 0.644986000007707
                                                                                        steps: 369
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1300
                score: 5.0
                              memory length: 279632
                                                        ensilon: 0.6443266600077213
                                                                                         steps: 333
                                                                                                        1r: 4e-05
                                                                                                                       evaluation
episode: 1301
                score: 4.0
                               memory length: 279874
                                                        epsilon: 0.6438475000077317
                                                                                         steps: 242
                                                                                                        lr: 4e-05
                                                                                                                       evaluation
episode: 1302
                score: 11.0
                               memory length: 280326
                                                         epsilon: 0.6429525400077511
                                                                                          steps: 452
                                                                                                         lr: 4e-05
                                                                                                                        evaluat
episode: 1303
                score: 7.0
                              memory length: 280733
                                                        epsilon: 0.6421466800077686
                                                                                         steps: 407
                                                                                                        1r: 4e-05
                                                                                                                       evaluation
                                                        epsilon: 0.6415724800077811
episode: 1304
                score: 5.0
                              memory length: 281023
                                                                                         steps: 290
                                                                                                        lr: 4e-05
                                                                                                                       evaluation
                                                                                                        lr: 4e-05
episode: 1305
                score: 1.0
                               memory length: 281175
                                                        epsilon: 0.6412715200077876
                                                                                         steps: 152
                                                                                                                       evaluation
                score: 5.0
                                                                                                        lr: 4e-05
episode: 1306
                              memory length: 281466
                                                        epsilon: 0.6406953400078002
                                                                                         steps: 291
                                                                                                                       evaluation
episode: 1307
                score: 6.0
                              memory length: 281840
                                                        epsilon: 0.6399548200078162
                                                                                         steps: 374
                                                                                                        1r: 4e-05
                                                                                                                       evaluation
episode: 1308
                              memory length: 282291
                                                        epsilon: 0.6390618400078356
                score: 8.0
                                                                                         steps: 451
                                                                                                        lr: 4e-05
                                                                                                                       evaluation
episode: 1309
                score: 4.0
                               memory length: 282571
                                                        epsilon: 0.6385074400078476
                                                                                         steps: 280
                                                                                                        lr: 4e-05
                                                                                                                       evaluation
episode: 1310
                score: 6.0
                              memory length: 282965
                                                        epsilon: 0.6377273200078646
                                                                                         steps: 394
                                                                                                        lr: 4e-05
                                                                                                                       evaluatio
episode: 1311
                score: 8.0
                              memory length: 283366
                                                        epsilon: 0.6369333400078818
                                                                                         steps: 401
                                                                                                        1r: 4e-05
                                                                                                                       evaluation
episode: 1312
                score: 6.0
                               memory length: 283707
                                                        epsilon: 0.6362581600078965
                                                                                         steps: 341
                                                                                                        lr: 4e-05
                                                                                                                       evaluation
                score: 8.0
                                                                                         steps: 437
episode: 1313
                              memory length: 284144
                                                        epsilon: 0.6353929000079153
                                                                                                        lr: 4e-05
                                                                                                                       evaluati
                score: 7.0
                                                        epsilon: 0.6345573400079334
episode: 1314
                              memory length: 284566
                                                                                         steps: 422
                                                                                                        1r: 4e-05
                                                                                                                       evaluation
                score: 1.0
episode: 1315
                               memory length: 284718
                                                        epsilon: 0.6342563800079399
                                                                                         steps: 152
                                                                                                        lr: 4e-05
                                                                                                                       evaluation
episode: 1316
                score: 4.0
                               memory length: 285015
                                                        epsilon: 0.6336683200079527
                                                                                         steps: 297
                                                                                                        lr: 4e-05
                                                                                                                       evaluati
episode: 1317
                score: 4.0
                              memory length: 285297
                                                        ensilon: 0.6331099600079648
                                                                                                        1r: 4e-05
                                                                                         steps: 282
                                                                                                                       evaluation
                score: 4.0
episode: 1318
                               memory length: 285576
                                                        epsilon: 0.6325575400079768
                                                                                         steps: 279
                                                                                                        lr: 4e-05
                                                                                                                       evaluation
episode: 1319
                score: 2.0
                               memory
                                     length: 285778
                                                        epsilon: 0.6321575800079855
                                                                                         steps: 202
                                                                                                        lr: 4e-05
                                                                                                                       evaluation
episode: 1320
                score: 6.0
                              memory length: 286125
                                                        epsilon: 0.6314705200080004
                                                                                         steps: 347
                                                                                                        lr: 4e-05
                                                                                                                       evaluation
                                                        epsilon: 0.6306468400080183
episode: 1321
                score: 7.0
                              memory length: 286541
                                                                                         steps: 416
                                                                                                        1r: 4e-05
                                                                                                                       evaluation
episode: 1322
                                                        epsilon: 0.6301300600080295
                score: 4.0
                               memory length: 286802
                                                                                         steps: 261
                                                                                                        lr: 4e-05
                                                                                                                       evaluation
episode: 1323
                score: 6.0
                              memory length: 287160
                                                        epsilon: 0.6294212200080449
                                                                                         steps: 358
                                                                                                        lr: 4e-05
                                                                                                                       evaluation
                                                                                         steps: 298
episode: 1324
                              memory length: 287458
                                                        epsilon: 0.6288311800080577
                                                                                                        lr: 4e-05
                                                                                                                       evaluatio
                score: 4.0
episode: 1325
                score: 2.0
                              memory length: 287641
                                                        epsilon: 0.6284688400080656
                                                                                         steps: 183
                                                                                                        1r: 4e-05
                                                                                                                       evaluation
episode: 1326
                score: 5.0
                               memory length: 287923
                                                        epsilon: 0.6279104800080777
                                                                                         steps: 282
                                                                                                        lr: 4e-05
                                                                                                                       evaluation
episode: 1327
                score: 3.0
                              memory length: 288134
                                                        epsilon: 0.6274927000080868
                                                                                         steps: 211
                                                                                                        lr: 4e-05
                                                                                                                       evaluation
                              memory length: 288315
episode: 1328
                score: 2.0
                                                        epsilon: 0.6271343200080945
                                                                                         steps: 181
                                                                                                        lr: 4e-05
                                                                                                                       evaluatio
                score: 5.0
episode: 1329
                               memory length: 288619
                                                        epsilon: 0.6265324000081076
                                                                                         steps: 304
                                                                                                        lr: 4e-05
                                                                                                                       evaluation
episode: 1330
                score: 7.0
                              memory length: 289062
                                                        epsilon: 0.6256552600081267
                                                                                         steps: 443
                                                                                                        lr: 4e-05
                                                                                                                       evaluati
                score: 5.0
episode: 1331
                              memory length: 289366
                                                        ensilon: 0.6250533400081397
                                                                                         steps: 304
                                                                                                        1r: 4e-05
                                                                                                                       evaluation
                score: 4.0
episode: 1332
                               memory length: 289623
                                                        epsilon: 0.6245444800081508
                                                                                         steps: 257
                                                                                                        lr: 4e-05
                                                                                                                       evaluation
episode: 1333
                score: 9.0
                               memory length: 289932
                                                        epsilon: 0.623932660008164
                                                                                        steps: 309
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1334
                              memory length: 290361
                score: 7.0
                                                        epsilon: 0.6230832400081825
                                                                                         steps: 429
                                                                                                        lr: 4e-05
                                                                                                                       evaluation
episode: 1335
                score: 7.0
                              memory length: 290731
                                                        epsilon: 0.6223506400081984
                                                                                         steps: 370
                                                                                                        lr: 4e-05
                                                                                                                       evaluation
episode: 1336
                score: 7.0
                               memory length: 291121
                                                        epsilon: 0.6215784400082152
                                                                                         steps: 390
                                                                                                        lr: 4e-05
                                                                                                                       evaluation
                score: 4.0
episode: 1337
                              memory length: 291404
                                                        epsilon: 0.6210181000082273
                                                                                         steps: 283
                                                                                                        lr: 4e-05
                                                                                                                       evaluation
                                                        epsilon: 0.6204082600082406
episode: 1338
                score: 5.0
                               memory length: 291712
                                                                                         steps: 308
                                                                                                        1r: 4e-05
                                                                                                                       evaluation
                score: 1.0
                                                        epsilon: 0.620065720008248
                                                                                                       lr: 4e-05
episode: 1339
                               memory length: 291885
                                                                                        steps: 173
                                                                                                                      evaluation
episode: 1340
                score: 9.0
                               memory length: 292403
                                                        epsilon: 0.6190400800082703
                                                                                         steps: 518
                                                                                                        lr: 4e-05
                                                                                                                       evaluation
episode: 1341
                score: 5.0
                              memory length: 292707
                                                        epsilon: 0.6184381600082833
                                                                                         steps: 304
                                                                                                        lr: 4e-05
                                                                                                                       evaluation
episode: 1342
                score: 6.0
                              memory length: 293061
                                                        epsilon: 0.6177372400082985
                                                                                         steps: 354
                                                                                                        lr: 4e-05
                                                                                                                       evaluation
episode: 1343
                score: 4.0
                              memory length: 293338
                                                        epsilon: 0.6171887800083105
                                                                                         steps: 277
                                                                                                        lr: 4e-05
                                                                                                                       evaluation
```

```
epsilon: 0.6165433000083245
episode: 1344
                score: 6.0
                              memory length: 293664
                                                                                        steps: 326
                                                                                                       1r: 4e-05
                                                                                                                      evaluation
episode: 1345
                                                        epsilon: 0.616242340008331
                score: 1.0
                              memory length: 293816
                                                                                       steps: 152
                                                                                                      1r: 4e-05
                                                                                                                     evaluation
                score: 3.0
                                                        epsilon: 0.6157889200083408
episode: 1346
                              memory
                                     length: 294045
                                                                                        steps: 229
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1347
                score: 6.0
                              memory length: 294402
                                                        epsilon: 0.6150820600083562
                                                                                        steps: 357
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
                                                                                                       1r: 4e-05
episode: 1348
                score: 5.0
                              memory length: 294695
                                                        epsilon: 0.6145019200083688
                                                                                        steps: 293
                                                                                                                      evaluation
                              memory length: 294953
episode: 1349
                score: 4.0
                                                        epsilon: 0.6139910800083799
                                                                                        steps: 258
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1350
                score: 4.0
                              memory length: 295217
                                                        epsilon: 0.6134683600083912
                                                                                        steps: 264
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1351
                score: 6.0
                              memory length: 295550
                                                        epsilon: 0.6128090200084055
                                                                                        steps: 333
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1352
                score: 3.0
                              memory length: 295782
                                                        epsilon: 0.6123496600084155
                                                                                        steps: 232
                                                                                                       1r: 4e-05
                                                                                                                      evaluation
episode: 1353
                score: 7.0
                              memory length: 296173
                                                        epsilon: 0.6115754800084323
                                                                                        steps: 391
                                                                                                       lr: 4e-05
                                                                                                                      evaluati
episode: 1354
                score: 3.0
                              memory length: 296402
                                                        epsilon: 0.6111220600084422
                                                                                        steps: 229
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
                score: 5.0
episode: 1355
                              memory length: 296686
                                                                                        steps: 284
                                                                                                       lr: 4e-05
                                                        epsilon: 0.6105597400084544
                                                                                                                      evaluation
episode: 1356
                score: 2.0
                              memory length: 296868
                                                        epsilon: 0.6101993800084622
                                                                                        steps: 182
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1357
                score: 5.0
                              memory length: 297194
                                                        epsilon: 0.6095539000084762
                                                                                        steps: 326
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
                score: 3.0
                                                                                                       lr: 4e-05
episode: 1358
                                                        epsilon: 0.6090272200084876
                                                                                        steps: 266
                              memory length: 297460
                                                                                                                      evaluation
episode: 1359
                score: 8.0
                              memory length: 297883
                                                        epsilon: 0.6081896800085058
                                                                                        steps: 423
                                                                                                       1r: 4e-05
                                                                                                                      evaluation
                score: 5.0
episode: 1360
                              memory length: 298196
                                                        epsilon: 0.6075699400085193
                                                                                        steps: 313
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
                score: 5.0
episode: 1361
                              memory length: 298504
                                                        epsilon: 0.6069601000085325
                                                                                        steps: 308
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1362
                score: 2.0
                              memory length: 298684
                                                        ensilon: 0.6066037000085402
                                                                                        steps: 180
                                                                                                       1r: 4e-05
                                                                                                                      evaluation
                              memory length: 299079
episode: 1363
                score: 6.0
                                                        epsilon: 0.6058216000085572
                                                                                        steps: 395
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1364
                score: 3.0
                              memory length: 299305
                                                        epsilon: 0.6053741200085669
                                                                                        steps: 226
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1365
                score: 6.0
                              memory length: 299645
                                                        epsilon: 0.6047009200085816
                                                                                        steps: 340
                                                                                                       lr: 4e-05
                                                                                                                      evaluation
episode: 1366
                score: 4.0
                              memory length: 299905
                                                        epsilon: 0.6041861200085927
                                                                                        steps: 260
                                                                                                       1r: 4e-05
                                                                                                                      evaluation
episode: 1367
                score: 5.0
                              memory length: 300214
                                                        epsilon: 0.603574300008606
                                                                                       steps: 309
                                                                                                      lr: 1.600000000000000003e
                score: 8.0
                              memory length: 300663
episode: 1368
                                                        epsilon: 0.6026852800086253
                                                                                        steps: 449
                                                                                                       lr: 1.60000000000000000
episode: 1369
                score: 3.0
                              memory length: 300890
                                                        epsilon: 0.6022358200086351
                                                                                        steps: 227
                                                                                                       lr: 1.60000000000000000
episode: 1370
                score: 7.0
                              memory length: 301281
                                                        epsilon: 0.6014616400086519
                                                                                        steps: 391
                                                                                                       lr: 1.60000000000000000
episode: 1371
                score: 4.0
                              memory length: 301543
                                                        epsilon: 0.6009428800086631
                                                                                        steps: 262
                                                                                                       lr: 1.60000000000000000
episode: 1372
                score: 3.0
                              memory length: 301754
                                                        epsilon: 0.6005251000086722
                                                                                        steps: 211
                                                                                                       lr: 1.60000000000000000
                                                                                                       lr: 1.6000000000000000
episode: 1373
                score: 7.0
                              memory length: 302161
                                                        epsilon: 0.5997192400086897
                                                                                        steps: 407
episode: 1374
                score: 5.0
                              memory
                                     length: 302490
                                                        epsilon: 0.5990678200087038
                                                                                        steps: 329
                                                                                                       lr: 1.60000000000000000
                score: 4.0
episode: 1375
                              memory length: 302748
                                                        epsilon: 0.5985569800087149
                                                                                        steps: 258
                                                                                                       lr: 1.60000000000000000
episode: 1376
                score: 6.0
                              memory length: 303105
                                                        epsilon: 0.5978501200087303
                                                                                        steps: 357
                                                                                                       lr: 1.60000000000000000
                score: 8.0
episode: 1377
                                     length: 303541
                                                        epsilon: 0.596986840008749
                                                                                       steps: 436
                                                                                                      lr: 1.60000000000000003e
episode: 1378
                score: 2.0
                              memory length: 303745
                                                        epsilon: 0.5965829200087578
                                                                                        steps: 204
                                                                                                       lr: 1.60000000000000000
episode: 1379
                              memory length: 304089
                                                        epsilon: 0.5959018000087726
                                                                                        steps: 344
                                                                                                       lr: 1.60000000000000000
                score: 6.0
                              memory length: 304290
episode: 1380
                score: 2.0
                                                        epsilon: 0.5955038200087812
                                                                                        steps: 201
                                                                                                       lr: 1.60000000000000000
episode: 1381
                score: 6.0
                              memory length: 304631
                                                        epsilon: 0.5948286400087959
                                                                                        steps: 341
                                                                                                       lr: 1.6000000000000000
episode: 1382
                              memory length: 304859
                                                        epsilon: 0.5943772000088057
                                                                                                       lr: 1.60000000000000000
                score: 3.0
                                                                                        steps: 228
episode: 1383
                score: 12.0
                               memory length: 305326
                                                        epsilon: 0.5934525400088257
                                                                                         steps: 467
                                                                                                        lr: 1.6000000000000000
                                                                                        steps: 456
episode: 1384
                score: 8.0
                              memory length: 305782
                                                        epsilon: 0.5925496600088453
                                                                                                       lr: 1.6000000000000000
episode: 1385
                score: 4.0
                              memory length: 306061
                                                        epsilon: 0.5919972400088573
                                                                                        steps: 279
                                                                                                       lr: 1.6000000000000000
episode: 1386
                score: 8.0
                              memory length: 306521
                                                        epsilon: 0.5910864400088771
                                                                                        steps: 460
                                                                                                       lr: 1.60000000000000000
                                                                                                       lr: 1.6000000000000000
episode: 1387
                score: 10.0
                               memory length: 307030
                                                        epsilon: 0.590078620008899
                                                                                        steps: 509
episode: 1388
                score: 4.0
                              memory length: 307308
                                                        epsilon: 0.5895281800089109
                                                                                        steps: 278
                                                                                                       lr: 1.6000000000000000
                score: 6.0
                                                                                       steps: 327
                              memory length: 307635
                                                        epsilon: 0.588880720008925
episode: 1389
                                                                                                      lr: 1.60000000000000003e
episode: 1390
                score: 3.0
                              memory length: 307899
                                                        epsilon: 0.5883580000089363
                                                                                        steps: 264
                                                                                                       lr: 1.60000000000000000
episode: 1391
                score: 13.0
                               memory length: 308423
                                                        epsilon: 0.5873204800089589
                                                                                         steps: 524
                                                                                                        lr: 1.6000000000000000
                score: 4.0
                              memory length: 308705
                                                        epsilon: 0.586762120008971
                                                                                       steps: 282
episode: 1392
                                                                                                      lr: 1.60000000000000003e
episode: 1393
                score: 10.0
                               memory length: 309177
                                                        ensilon: 0.5858275600089913
                                                                                         steps: 472
                                                                                                        lr: 1.6000000000000000
episode: 1394
                score: 5.0
                              memory length: 309541
                                                        epsilon: 0.5851068400090069
                                                                                        steps: 364
                                                                                                       lr: 1.60000000000000000
episode: 1395
                score: 5.0
                              memory length: 309832
                                                        epsilon: 0.5845306600090194
                                                                                        steps: 291
                                                                                                       lr: 1.6000000000000000
episode: 1396
                score: 4.0
                              memory length: 310073
                                                        epsilon: 0.5840534800090298
                                                                                        steps: 241
                                                                                                       lr: 1.60000000000000000
episode: 1397
                score: 9.0
                              memory length: 310542
                                                        epsilon: 0.58312486000905
                                                                                      steps: 469
                                                                                                     lr: 1.600000000000000000e-
                                                                                         steps: 516
episode: 1398
                score: 10.0
                               memory length: 311058
                                                        epsilon: 0.5821031800090721
                                                                                                        lr: 1.6000000000000000
                score: 8.0
episode: 1399
                              memory length: 311493
                                                        epsilon: 0.5812418800090908
                                                                                        steps: 435
                                                                                                       lr: 1.6000000000000000
episode: 1400
                score: 8.0
                              memory length: 311903
                                                        epsilon: 0.5804300800091085
                                                                                        steps: 410
                                                                                                       lr: 1.60000000000000000
                                                        epsilon: 0.5797271800091237
episode: 1401
                score: 6.0
                              memory length: 312258
                                                                                        steps: 355
                                                                                                       lr: 1.60000000000000000
episode: 1402
                score: 5.0
                              memory length: 312586
                                                        epsilon: 0.5790777400091378
                                                                                        steps: 328
                                                                                                       lr: 1.6000000000000000
episode: 1403
                score: 8.0
                              memory length: 312989
                                                        epsilon: 0.5782798000091551
                                                                                        steps: 403
                                                                                                       lr: 1.60000000000000000
                score: 7.0
                                                                                                       lr: 1.6000000000000000
episode: 1404
                              memory length: 313376
                                                        epsilon: 0.5775135400091718
                                                                                        steps: 387
episode: 1405
                score: 4.0
                              memory
                                     length: 313672
                                                        epsilon: 0.5769274600091845
                                                                                        steps: 296
                                                                                                           1.60000000000000000
episode: 1406
                score: 2.0
                              memory length: 313855
                                                        epsilon: 0.5765651200091924
                                                                                        steps: 183
                                                                                                       lr: 1.6000000000000000
episode: 1407
                                                        epsilon: 0.5759770600092051
                score: 4.0
                              memory length: 314152
                                                                                        steps: 297
                                                                                                       lr: 1.60000000000000000
                score: 4.0
                                                        epsilon: 0.5753890000092179
episode: 1408
                              memory length: 314449
                                                                                        steps: 297
                                                                                                       lr: 1.6000000000000000
                score: 16.0
                                                        epsilon: 0.5744801800092376
episode: 1409
                               memory length: 314908
                                                                                         steps: 459
                                                                                                        lr: 1.6000000000000000
episode: 1410
                score: 4.0
                              memory length: 315171
                                                        epsilon: 0.5739594400092489
                                                                                        steps: 263
                                                                                                       lr: 1.60000000000000000
                              memory length: 315411
episode: 1411
                score: 4.0
                                                        epsilon: 0.5734842400092592
                                                                                        steps: 240
                                                                                                       lr: 1.60000000000000000
episode: 1412
                score: 5.0
                              memory length: 315721
                                                        epsilon: 0.5728704400092726
                                                                                        steps: 310
                                                                                                       lr: 1.6000000000000000
episode: 1413
                score: 4.0
                              memory length: 315983
                                                        epsilon: 0.5723516800092838
                                                                                                       lr: 1.60000000000000000
                                                                                        steps: 262
episode: 1414
                score: 10.0
                               memory length: 316345
                                                        epsilon: 0.5716349200092994
                                                                                         steps: 362
                                                                                                        lr: 1.6000000000000000
episode: 1415
                score: 7.0
                              memory length: 316717
                                                        epsilon: 0.5708983600093154
                                                                                        steps: 372
                                                                                                       lr: 1.60000000000000000
episode: 1416
                score: 4.0
                              memory length: 317011
                                                        epsilon: 0.570316240009328
                                                                                       steps: 294
                                                                                                      lr: 1.600000000000000003e
episode: 1417
                score: 8.0
                              memory length: 317466
                                                        ensilon: 0.5694153400093476
                                                                                        steps: 455
                                                                                                       lr: 1.60000000000000000
                                                        epsilon: 0.5688965800093588
episode: 1418
                score: 4.0
                              memory length: 317728
                                                                                        steps: 262
                                                                                                       lr: 1.60000000000000000
episode: 1419
                score: 5.0
                              memory length: 318036
                                                        epsilon: 0.5682867400093721
                                                                                        steps: 308
                                                                                                       lr: 1.6000000000000000
                              memory length: 318278
episode: 1420
                score: 4.0
                                                        epsilon: 0.5678075800093825
                                                                                        steps: 242
                                                                                                       lr: 1.60000000000000000
episode: 1421
                              memory length: 318597
                score: 6.0
                                                        epsilon: 0.5671759600093962
                                                                                        steps: 319
                                                                                                       lr: 1.60000000000000000
episode: 1422
                score: 8.0
                              memory
                                     length: 318976
                                                        epsilon: 0.5664255400094125
                                                                                        steps: 379
                                                                                                       lr: 1.60000000000000000
                score: 9.0
                                                                                        steps: 532
episode: 1423
                              memory length: 319508
                                                       epsilon: 0.5653721800094353
                                                                                                       lr: 1.60000000000000000
                                                        epsilon: 0.5645049400094542
episode: 1424
                score: 8.0
                              memory length: 319946
                                                                                        steps: 438
                                                                                                       lr: 1.60000000000000000
episode: 1425
                score: 9.0
                              memory length: 320402
                                                        epsilon: 0.5636020600094738
                                                                                        steps: 456
                                                                                                       lr: 1.6000000000000000
episode: 1426
                score: 11.0
                               memory length: 320844
                                                        epsilon: 0.5627269000094928
                                                                                         steps: 442
                                                                                                        lr: 1.6000000000000000
                              memory length: 321054
                                                                                        steps: 210
episode: 1427
                score: 3.0
                                                        epsilon: 0.5623111000095018
                                                                                                       lr: 1.6000000000000000
episode: 1428
                score: 7.0
                              memory length: 321475
                                                        epsilon: 0.5614775200095199
                                                                                        steps: 421
                                                                                                       lr: 1.60000000000000000
```

```
memory length: 322028
                                                        epsilon: 0.5603825800095437
                                                                                                       lr: 1.6000000000000000
episode: 1429
                score: 15.0
                                                                                        steps: 553
episode: 1430
                score: 10.0
                                                                                        steps: 545
                              memory length: 322573
                                                        epsilon: 0.5593034800095671
                                                                                                       lr: 1.6000000000000000
episode: 1431
                              memory length: 322837
                                                                                       steps: 264
                score: 4.0
                                                       ensilon: 0.5587807600095784
                                                                                                      lr: 1.60000000000000000
                score: 9.0
episode: 1432
                              memory length: 323314
                                                       epsilon: 0.5578363000095989
                                                                                       steps: 477
                                                                                                      lr: 1.60000000000000000
episode: 1433
                score: 9.0
                              memory length: 323803
                                                       epsilon: 0.55686808000962
                                                                                     steps: 489
                                                                                                    episode: 1434
                score: 3.0
                              memory length: 324053
                                                       epsilon: 0.5563730800096307
                                                                                       steps: 250
                                                                                                      lr: 1.60000000000000000
episode: 1435
                score: 4.0
                              memory length: 324313
                                                       epsilon: 0.5558582800096419
                                                                                       steps: 260
                                                                                                      lr: 1.60000000000000000
                                                                                       steps: 355
episode: 1436
                score: 6.0
                              memory length: 324668
                                                       epsilon: 0.5551553800096571
                                                                                                      lr: 1.60000000000000000
                              memory length: 325020
episode: 1437
                score: 6.0
                                                       epsilon: 0.5544584200096723
                                                                                       steps: 352
                                                                                                      lr: 1.60000000000000000
episode: 1438
                score: 3.0
                                                       epsilon: 0.5540030200096822
                              memory length: 325250
                                                                                       steps: 230
                                                                                                      lr: 1.60000000000000000
episode: 1439
                score: 8.0
                              memory length: 325651
                                                       epsilon: 0.5532090400096994
                                                                                       steps: 401
                                                                                                      lr: 1.60000000000000000
episode: 1440
                score: 4.0
                              memory length: 325909
                                                       epsilon: 0.5526982000097105
                                                                                       steps: 258
                                                                                                      lr: 1.6000000000000000
episode: 1441
                score: 6.0
                              memory length: 326285
                                                       epsilon: 0.5519537200097266
                                                                                       steps: 376
                                                                                                      lr: 1.60000000000000000
                                                                                                      lr: 1.6000000000000000
episode: 1442
                score: 5.0
                              memory length: 326590
                                                       epsilon: 0.5513498200097398
                                                                                       steps: 305
episode: 1443
                score: 3.0
                              memorv
                                     length: 326804
                                                       epsilon: 0.550926100009749
                                                                                      steps: 214
                                                                                                     lr: 1.600000000000000003e
episode: 1444
                score: 9.0
                                                                                       steps: 417
                              memory length: 327221
                                                       epsilon: 0.5501004400097669
                                                                                                      lr: 1.60000000000000000
episode: 1445
                score: 6.0
                              memory length: 327542
                                                       epsilon: 0.5494648600097807
                                                                                       steps: 321
                                                                                                      lr: 1.60000000000000000
episode: 1446
                score: 7.0
                              memory length: 327878
                                                       epsilon: 0.5487995800097951
                                                                                       steps: 336
                                                                                                      lr: 1.60000000000000000
                score: 5.0
episode: 1447
                              memory length: 328187
                                                       epsilon: 0.5481877600098084
                                                                                       steps: 309
                                                                                                      lr: 1.60000000000000000
episode: 1448
                              memory length: 328399
                                                       ensilon: 0.5477680000098175
                                                                                       steps: 212
                                                                                                      lr: 1.60000000000000000
                score: 3.0
episode: 1449
                score: 6.0
                              memory length: 328738
                                                       epsilon: 0.5470967800098321
                                                                                       steps: 339
                                                                                                      lr: 1.60000000000000000
episode: 1450
                score: 12.0
                               memory length: 329333
                                                        epsilon: 0.5459186800098577
                                                                                        steps: 595
                                                                                                       lr: 1.6000000000000000
episode: 1451
                              memory length: 329743
                                                       epsilon: 0.5451068800098753
                                                                                       steps: 410
                score: 7.0
                                                                                                      lr: 1.6000000000000000
episode: 1452
                score: 4.0
                              memory length: 330025
                                                       epsilon: 0.5445485200098874
                                                                                       steps: 282
                                                                                                      lr: 1.60000000000000000
episode: 1453
                score: 3.0
                              memory length: 330277
                                                       epsilon: 0.5440495600098982
                                                                                       steps: 252
                                                                                                      lr: 1.60000000000000000
                               memory length: 330679
episode: 1454
                                                        epsilon: 0.5432536000099155
                score: 11.0
                                                                                        steps: 402
                                                                                                       lr: 1.6000000000000000
episode: 1455
                score: 5.0
                              memory length: 330991
                                                       epsilon: 0.5426358400099289
                                                                                       steps: 312
                                                                                                      lr: 1.60000000000000000
episode: 1456
                score: 4.0
                              memory length: 331253
                                                       epsilon: 0.5421170800099402
                                                                                       steps: 262
                                                                                                      lr: 1.60000000000000000
episode: 1457
                score: 8.0
                              memory length: 331685
                                                       epsilon: 0.5412617200099588
                                                                                       steps: 432
                                                                                                      lr: 1.6000000000000000
episode: 1458
                score: 7.0
                              memory length: 332058
                                                       epsilon: 0.5405231800099748
                                                                                       steps: 373
                                                                                                      lr: 1.6000000000000000
                                                                                                      lr: 1.6000000000000000
episode: 1459
                score: 5.0
                              memory length: 332350
                                                       epsilon: 0.5399450200099873
                                                                                       steps: 292
                score: 5.0
                                                                                                      lr: 1.6000000000000000
episode: 1460
                              memory
                                     length: 332676
                                                       epsilon: 0.5392995400100014
                                                                                       steps: 326
                score: 5.0
episode: 1461
                              memory length: 333019
                                                       epsilon: 0.5386204000100161
                                                                                       steps: 343
                                                                                                      lr: 1.60000000000000000
                                                       epsilon: 0.5377195000100357
episode: 1462
                score: 9.0
                              memory length: 333474
                                                                                       steps: 455
                                                                                                      lr: 1.60000000000000000
                                                       epsilon: 0.5370661000100498
episode: 1463
                score: 6.0
                              memory length: 333804
                                                                                       steps: 330
                                                                                                      lr: 1.60000000000000000
episode: 1464
                score: 5.0
                              memory length: 334129
                                                       epsilon: 0.5364226000100638
                                                                                       steps: 325
                                                                                                      lr: 1.60000000000000003
episode: 1465
                score: 6.0
                              memory length: 334470
                                                       epsilon: 0.5357474200100785
                                                                                       steps: 341
                                                                                                      lr: 1.60000000000000000
episode: 1466
                score: 11.0
                               memory length: 335024
                                                        epsilon: 0.5346505000101023
                                                                                        steps: 554
                                                                                                       lr: 1.6000000000000000
episode: 1467
                score: 12.0
                               memory length: 335607
                                                        epsilon: 0.5334961600101273
                                                                                        steps: 583
                                                                                                       lr: 1.6000000000000000
                score: 5.0
                              memory length: 335896
                                                       epsilon: 0.5329239400101398
                                                                                       steps: 289
episode: 1468
                                                                                                      lr: 1.6000000000000000
                score: 7.0
                                                       epsilon: 0.5321695600101561
episode: 1469
                              memory length: 336277
                                                                                       steps: 381
                                                                                                      lr: 1.60000000000000000
                                                                                       steps: 476
episode: 1470
                score: 9.0
                                                       epsilon: 0.5312270800101766
                              memory length: 336753
                                                                                                      lr: 1.60000000000000000
episode: 1471
                score: 6.0
                              memory length: 337088
                                                       epsilon: 0.530563780010191
                                                                                      steps: 335
                                                                                                     lr: 1.600000000000000003e
episode: 1472
                score: 11.0
                               memory length: 337503
                                                        epsilon: 0.5297420800102088
                                                                                        steps: 415
                                                                                                       lr: 1.6000000000000000
                score: 5.0
                                                                                                      lr: 1.6000000000000000
episode: 1473
                              memory length: 337821
                                                       epsilon: 0.5291124400102225
                                                                                       steps: 318
episode: 1474
                score: 5.0
                              memory length: 338148
                                                       epsilon: 0.5284649800102366
                                                                                       steps: 327
                                                                                                      lr: 1.6000000000000000
episode: 1475
                score: 4.0
                              memory length: 338466
                                                       epsilon: 0.5278353400102502
                                                                                       steps: 318
                                                                                                      lr: 1.6000000000000000
                              memory length: 338904
episode: 1476
                score: 9.0
                                                       epsilon: 0.5269681000102691
                                                                                       steps: 438
                                                                                                      lr: 1.60000000000000000
                score: 4.0
                                                       epsilon: 0.5264493400102803
episode: 1477
                              memory length: 339166
                                                                                       steps: 262
                                                                                                      lr: 1.60000000000000000
episode: 1478
                score: 6.0
                              memory length: 339543
                                                       epsilon: 0.5257028800102965
                                                                                       steps: 377
                                                                                                      lr: 1.60000000000000000
episode: 1479
                              memory length: 340050
                                                       epsilon: 0.5246990200103183
                score: 9.0
                                                                                       steps: 507
                                                                                                      lr: 1.60000000000000000
                                                        epsilon: 0.5238416800103369
episode: 1480
                score: 11.0
                               memory length: 340483
                                                                                        steps: 433
                                                                                                       lr: 1.6000000000000000
episode: 1481
                score: 6.0
                              memory length: 340879
                                                       epsilon: 0.523057600010354
                                                                                       steps: 396
                                                                                                     lr: 1.600000000000000003e
episode: 1482
                score: 5.0
                              memory length: 341187
                                                       epsilon: 0.5224477600103672
                                                                                                      lr: 1.60000000000000000
                                                                                       steps: 308
episode: 1483
                                                       epsilon: 0.5218399000103804
                score: 5.0
                              memory length: 341494
                                                                                       steps: 307
                                                                                                      lr: 1.60000000000000000
episode: 1484
                score: 9.0
                              memory length: 341900
                                                       epsilon: 0.5210360200103978
                                                                                       steps: 406
                                                                                                      lr: 1.6000000000000000
episode: 1485
                score: 6.0
                              memory length: 342221
                                                       epsilon: 0.5204004400104116
                                                                                       steps: 321
                                                                                                      lr: 1.60000000000000000
                score: 5.0
                                                       epsilon: 0.519784660010425
episode: 1486
                              memory length: 342532
                                                                                      steps: 311
                                                                                                     lr: 1.600000000000000003e
episode: 1487
                score: 7.0
                              memory length: 342888
                                                       epsilon: 0.5190797800104403
                                                                                       steps: 356
                                                                                                      lr: 1.6000000000000000
episode: 1488
                score: 5.0
                                     length: 343194
                                                       epsilon: 0.5184739000104535
                                                                                       steps: 306
                                                                                                      lr: 1.6000000000000000
                              memory
                score: 9.0
                                                       epsilon: 0.5174740000104752
                                                                                       steps: 505
                                                                                                      lr: 1.60000000000000000
episode: 1489
                              memory length: 343699
episode: 1490
                score: 4.0
                              memory length: 343975
                                                       epsilon: 0.516927520010487
                                                                                       steps: 276
                                                                                                     lr: 1.60000000000000003e
episode: 1491
                score: 7.0
                              memory
                                     length: 344346
                                                       epsilon: 0.516192940010503
                                                                                       steps: 371
                                                                                                     lr: 1.60000000000000003e
episode: 1492
                score: 6.0
                              memory length: 344682
                                                       epsilon: 0.5155276600105174
                                                                                       steps: 336
                                                                                                      lr: 1.60000000000000000
episode: 1493
                score: 3.0
                              memory length: 344912
                                                       epsilon: 0.5150722600105273
                                                                                       steps: 230
                                                                                                      lr: 1.60000000000000000
                score: 5.0
episode: 1494
                                     length: 345234
                                                       epsilon: 0.5144347000105411
                                                                                                      lr: 1.60000000000000000
                              memory
                                                                                       steps: 322
                score: 8.0
                              memory length: 345702
                                                       epsilon: 0.5135080600105613
                                                                                       steps: 468
                                                                                                      lr: 1.6000000000000000
episode: 1495
episode: 1496
                score: 7.0
                              memory length: 346085
                                                       epsilon: 0.5127497200105777
                                                                                       steps: 383
                                                                                                      lr: 1.6000000000000000
episode: 1497
                score: 7.0
                              memory length: 346459
                                                       epsilon: 0.5120092000105938
                                                                                       steps: 374
                                                                                                      lr: 1.60000000000000000
episode: 1498
                score: 5.0
                              memory length: 346807
                                                       epsilon: 0.5113201600106088
                                                                                       steps: 348
                                                                                                      lr: 1.6000000000000000
                              memory length: 347191
episode: 1499
                score: 7.0
                                                       epsilon: 0.5105598400106253
                                                                                       steps: 384
                                                                                                      lr: 1.60000000000000000
                score: 9.0
                                                                                       steps: 517
episode: 1500
                              memory length: 347708
                                                       epsilon: 0.5095361800106475
                                                                                                      lr: 1.60000000000000000
                                                                                       steps: 410
                                                       epsilon: 0.5087243800106651
                                                                                                      lr: 1.60000000000000000
episode: 1501
                score: 7.0
                              memory length: 348118
episode: 1502
                score: 4.0
                              memory length: 348387
                                                       epsilon: 0.5081917600106767
                                                                                       steps: 269
                                                                                                      lr: 1.6000000000000000
episode: 1503
                score: 8.0
                              memory length: 348825
                                                       epsilon: 0.5073245200106955
                                                                                       steps: 438
                                                                                                      lr: 1.60000000000000000
                                                                                                      lr: 1.6000000000000000
episode: 1504
                score: 8.0
                              memory length: 349242
                                                       epsilon: 0.5064988600107134
                                                                                       steps: 417
episode: 1505
                score: 3.0
                              memory length: 349491
                                                       epsilon: 0.5060058400107241
                                                                                       steps: 249
                                                                                                      lr: 1.6000000000000000
                                                                                       steps: 420
episode: 1506
                score: 9.0
                              memory length: 349911
                                                       epsilon: 0.5051742400107422
                                                                                                      lr: 1.60000000000000000
episode: 1507
                score: 6.0
                              memory length: 350274
                                                       epsilon: 0.5044555000107578
                                                                                       steps: 363
                                                                                                      lr: 1.60000000000000000
                score: 7.0
episode: 1508
                                                                                                      lr: 1.60000000000000000
                              memory length: 350643
                                                       epsilon: 0.5037248800107736
                                                                                       steps: 369
episode: 1509
                score: 5.0
                              memory length: 350959
                                                       epsilon: 0.5030992000107872
                                                                                       steps: 316
                                                                                                      lr: 1.60000000000000000
episode: 1510
                              memory length: 351352
                                                       epsilon: 0.5023210600108041
                                                                                                      lr: 1.60000000000000000
                score: 6.0
                                                                                       steps: 393
                                                        epsilon: 0.501081580010831
episode: 1511
                score: 13.0
                               memory length: 351978
                                                                                       steps: 626
                                                                                                      lr: 1.60000000000000000
episode: 1512
                score: 12.0
                               memory length: 352432
                                                        epsilon: 0.5001826600108505
                                                                                        steps: 454
                                                                                                       lr: 1.6000000000000000
episode: 1513
                                                       epsilon: 0.4995114400108514
                                                                                       steps: 339
                                                                                                      lr: 1.60000000000000003
                score: 6.0
                              memory length: 352771
```

```
episode: 1514
                score: 9.0
                                                       epsilon: 0.49855114001084533
                                                                                                       lr: 1.6000000000000000
                              memory length: 353256
                                                                                        steps: 485
                score: 9.0
                                                                                                      lr: 1.60000000000000003
episode: 1515
                              memory length: 353713
                                                       epsilon: 0.4976462800108396
                                                                                        steps: 457
episode: 1516
                score: 5.0
                              memory length: 354006
                                                       epsilon: 0.49706614001083593
                                                                                        steps: 293
                                                                                                       lr: 1.6000000000000000
episode: 1517
                score: 5.0
                              memory length: 354302
                                                                                       steps: 296
                                                                                                      lr: 1.60000000000000000
                                                       epsilon: 0.4964800600108322
                score: 1.0
                                                       epsilon: 0.4961791000108303
episode: 1518
                              memory length: 354454
                                                                                        steps: 152
                                                                                                      lr: 1.60000000000000000
episode: 1519
                score: 10.0
                               memory length: 354999
                                                        epsilon: 0.4951000000108235
                                                                                        steps: 545
                                                                                                       lr: 1.6000000000000000
                               memory length: 355491
episode: 1520
                score: 10.0
                                                        epsilon: 0.49412584001081733
                                                                                         steps: 492
                                                                                                        lr: 1.600000000000000
episode: 1521
                score: 6.0
                              memory length: 355868
                                                       epsilon: 0.4933793800108126
                                                                                        steps: 377
                                                                                                      lr: 1.60000000000000000
episode: 1522
                score: 11.0
                               memory length: 356402
                                                        epsilon: 0.4923220600108059
                                                                                        steps: 534
                                                                                                       lr: 1.600000000000000
episode: 1523
                score: 6.0
                              memory length: 356776
                                                       epsilon: 0.49158154001080123
                                                                                        steps: 374
                                                                                                       lr: 1.6000000000000000
                                                       epsilon: 0.49087270001079675
episode: 1524
                score: 6.0
                              memory length: 357134
                                                                                        steps: 358
                                                                                                       lr: 1.6000000000000000
episode: 1525
                score: 11.0
                               memory length: 357669
                                                        epsilon: 0.48981340001079005
                                                                                         steps: 535
                                                                                                        lr: 1.600000000000000
episode: 1526
                score: 7.0
                              memory length: 358039
                                                       epsilon: 0.4890808000107854
                                                                                        steps: 370
                                                                                                      lr: 1.6000000000000000
episode: 1527
                score: 6.0
                              memory length: 358379
                                                       epsilon: 0.48840760001078115
                                                                                        steps: 340
                                                                                                       lr: 1.6000000000000000
episode: 1528
                score: 9.0
                              memory length: 358874
                                                       epsilon: 0.48742750001077495
                                                                                        steps: 495
                                                                                                       lr: 1.6000000000000000
episode: 1529
                score: 6.0
                              memory length: 359193
                                                       epsilon: 0.48679588001077095
                                                                                        steps: 319
                                                                                                           1.6000000000000000
episode: 1530
                score: 5.0
                              memory length: 359504
                                                       epsilon: 0.48618010001076706
                                                                                        steps: 311
                                                                                                       lr: 1.6000000000000000
episode: 1531
                score: 11.0
                               memory length: 360039
                                                        ensilon: 0.48512080001076036
                                                                                         steps: 535
                                                                                                        lr: 1.600000000000000
episode: 1532
                score: 8.0
                              memory length: 360475
                                                       epsilon: 0.4842575200107549
                                                                                        steps: 436
                                                                                                      lr: 1.60000000000000003
episode: 1533
                score: 6.0
                              memory length: 360851
                                                       epsilon: 0.4835130400107502
                                                                                       steps: 376
                                                                                                      lr: 1.6000000000000000
episode: 1534
                score: 8.0
                              memory length: 361295
                                                       ensilon: 0.4826339200107446
                                                                                        steps: 444
                                                                                                      lr: 1.60000000000000000
episode: 1535
                score: 11.0
                               memory length: 361772
                                                        epsilon: 0.48168946001073865
                                                                                         steps: 477
                                                                                                        lr: 1.600000000000000
episode: 1536
                score: 2.0
                              memory length: 361955
                                                       epsilon: 0.48132712001073635
                                                                                        steps: 183
                                                                                                       lr: 1.6000000000000000
episode: 1537
                score: 5.0
                                                       epsilon: 0.48072718001073256
                                                                                        steps: 303
                              memory length: 362258
                                                                                                       lr: 1.600000000000000
episode: 1538
                                                       epsilon: 0.4801371400107288
                score: 4.0
                              memory length: 362556
                                                                                        steps: 298
                                                                                                      lr: 1.600000000000000003
                score: 15.0
                                                        epsilon: 0.47890756001072105
                                                                                                        lr: 1.60000000000000
episode: 1539
                               memory length: 363177
                                                                                         steps: 621
episode: 1540
                score: 8.0
                              memory length: 363610
                                                       epsilon: 0.4780502200107156
                                                                                                      lr: 1.6000000000000000
                                                                                       steps: 433
episode: 1541
                                                        epsilon: 0.4769414200107086
                score: 12.0
                               memory length: 364170
                                                                                        steps: 560
                                                                                                       lr: 1.6000000000000000
episode: 1542
                score: 8.0
                              memory length: 364597
                                                       epsilon: 0.47609596001070326
                                                                                        steps: 427
                                                                                                       lr: 1.6000000000000000
episode: 1543
                score: 3.0
                              memory length: 364827
                                                       epsilon: 0.4756405600107004
                                                                                        steps: 230
                                                                                                      lr: 1.6000000000000000
                score: 4.0
                                                       epsilon: 0.47512774001069713
episode: 1544
                              memory length: 365086
                                                                                        steps: 259
                                                                                                       lr: 1.6000000000000000
episode: 1545
                score: 5.0
                              memory length: 365378
                                                       epsilon: 0.4745495800106935
                                                                                        steps: 292
                                                                                                      lr: 1.60000000000000000
                                                                                                       lr: 1.6000000000000000
episode: 1546
                score: 8.0
                              memory
                                     length: 365834
                                                       epsilon: 0.47364670001068776
                                                                                        steps: 456
                score: 7.0
episode: 1547
                              memory length: 366176
                                                       epsilon: 0.4729695400106835
                                                                                        steps: 342
                                                                                                      lr: 1.6000000000000000
episode: 1548
                score: 11.0
                               memory length: 366705
                                                        ensilon: 0.47192212001067685
                                                                                         steps: 529
                                                                                                        lr: 1.600000000000000
                score: 3.0
                                                       epsilon: 0.47149840001067417
                                                                                        steps: 214
episode: 1549
                              memory length: 366919
                                                                                                       lr: 1.6000000000000000
                score: 5.0
episode: 1550
                              memory length: 367262
                                                       epsilon: 0.47081926001066987
                                                                                        steps: 343
                                                                                                       lr: 1.6000000000000000
                score: 9.0
episode: 1551
                              memory length: 367752
                                                       epsilon: 0.46984906001066373
                                                                                        steps: 490
                                                                                                       lr: 1.600000000000000
episode: 1552
                score: 9.0
                              memory length: 368258
                                                       epsilon: 0.4688471800106574
                                                                                        steps: 506
                                                                                                      lr: 1.600000000000000003
episode: 1553
                score: 6.0
                              memory length: 368651
                                                       epsilon: 0.46806904001065247
                                                                                        steps: 393
                                                                                                       lr: 1.6000000000000000
episode: 1554
                score: 10.0
                               memory length: 369162
                                                        epsilon: 0.46705726001064607
                                                                                         steps: 511
                                                                                                        lr: 1.600000000000000
                                                       epsilon: 0.46618804001064057
episode: 1555
                score: 8.0
                              memory length: 369601
                                                                                        steps: 439
                                                                                                       lr: 1.6000000000000000
episode: 1556
                score: 11.0
                                                                                         steps: 545
                               memory length: 370146
                                                        epsilon: 0.46510894001063374
                                                                                                        lr: 1.600000000000000
episode: 1557
                score: 10.0
                               memory length: 370656
                                                        epsilon: 0.46409914001062735
                                                                                         steps: 510
                                                                                                        lr: 1.6000000000000000
                score: 10.0
                               memory length: 371159
                                                        epsilon: 0.46310320001062105
                                                                                         steps: 503
episode: 1558
                                                                                                        lr: 1.600000000000000
episode: 1559
                                                                                                      lr: 1.60000000000000003
                score: 6.0
                              memory length: 371522
                                                       epsilon: 0.4623844600106165
                                                                                        steps: 363
episode: 1560
                score: 13.0
                               memory length: 372067
                                                        epsilon: 0.4613053600106097
                                                                                        steps: 545
                                                                                                       lr: 1.6000000000000000
episode: 1561
                score: 9.0
                                                       epsilon: 0.46033516001060354
                                                                                        steps: 490
                              memory length: 372557
                                                                                                       episode: 1562
                score: 4.0
                              memory length: 372797
                                                       epsilon: 0.45985996001060053
                                                                                        steps: 240
                                                                                                       lr: 1.6000000000000000
                                                                                                        lr: 1.60000000000000
episode: 1563
                score: 10.0
                               memory length: 373314
                                                        epsilon: 0.45883630001059406
                                                                                         steps: 517
episode: 1564
                score: 7.0
                              memory length: 373717
                                                       epsilon: 0.458038360010589
                                                                                      steps: 403
                                                                                                     lr: 1.600000000000000003e
episode: 1565
                              memory length: 374077
                                                       epsilon: 0.4573255600105845
                score: 6.0
                                                                                       steps: 360
                                                                                                      lr: 1.60000000000000000
episode: 1566
                score: 7.0
                              memory length: 374470
                                                       epsilon: 0.4565474200105796
                                                                                        steps: 393
                                                                                                      lr: 1.60000000000000000
episode: 1567
                score: 10.0
                               memory length: 374967
                                                        epsilon: 0.45556336001057335
                                                                                         steps: 497
                                                                                                        lr: 1.600000000000000
                score: 9.0
episode: 1568
                              memory length: 375408
                                                       epsilon: 0.4546901800105678
                                                                                       steps: 441
                                                                                                      lr: 1.60000000000000003
episode: 1569
                                                       epsilon: 0.4542110200105648
                score: 4.0
                              memory length: 375650
                                                                                        steps: 242
                                                                                                      lr: 1.60000000000000000
episode: 1570
                score: 3.0
                              memory length: 375901
                                                       epsilon: 0.45371404001056165
                                                                                        steps: 251
                                                                                                       lr: 1.6000000000000000
episode: 1571
                score: 15.0
                               memory length: 376474
                                                        epsilon: 0.45257950001055447
                                                                                         steps: 573
                                                                                                        lr: 1.600000000000000
episode: 1572
                score: 5.0
                              memory length: 376799
                                                       epsilon: 0.4519360000105504
                                                                                        steps: 325
                                                                                                      lr: 1.60000000000000000
                score: 9.0
episode: 1573
                              memory length: 377276
                                                       epsilon: 0.4509915400105444
                                                                                        steps: 477
                                                                                                      lr: 1.60000000000000000
episode: 1574
                score: 4.0
                                     length: 377540
                                                       epsilon: 0.4504688200105411
                                                                                        steps: 264
                                                                                                      lr: 1.6000000000000000
                              memorv
                score: 9.0
episode: 1575
                              memory length: 378006
                                                       epsilon: 0.4495461400105353
                                                                                       steps: 466
                                                                                                      lr: 1.6000000000000000
                                                       epsilon: 0.44886304001053096
                                                                                                       lr: 1.6000000000000000
episode: 1576
                score: 5.0
                              memory length: 378351
                                                                                        steps: 345
episode: 1577
                score: 7.0
                                                                                        steps: 402
                                                                                                      lr: 1.60000000000000000
                              memory
                                     length: 378753
                                                       epsilon: 0.4480670800105259
                score: 6.0
episode: 1578
                              memory length: 379073
                                                       epsilon: 0.4474334800105219
                                                                                        steps: 320
                                                                                                      lr: 1.6000000000000000
episode: 1579
                               memory length: 379551
                score: 10.0
                                                        ensilon: 0.4464870400105159
                                                                                        steps: 478
                                                                                                       lr: 1.6000000000000000
episode: 1580
                score: 7.0
                              memory length: 379920
                                                       epsilon: 0.4457564200105113
                                                                                        steps: 369
                                                                                                      lr: 1.60000000000000003
episode: 1581
                score: 4.0
                              memory length: 380220
                                                       epsilon: 0.44516242001050754
                                                                                        steps: 300
                                                                                                       lr: 1.6000000000000000
episode: 1582
                score: 9.0
                              memory length: 380703
                                                       epsilon: 0.4442060800105015
                                                                                       steps: 483
                                                                                                      lr: 1.6000000000000000
episode: 1583
                score: 9.0
                              memory length: 381158
                                                       epsilon: 0.4433051800104958
                                                                                        steps: 455
                                                                                                      lr: 1.60000000000000000
episode: 1584
                score: 12.0
                               memory length: 381679
                                                        epsilon: 0.44227360001048927
                                                                                         steps: 521
                                                                                                        lr: 1.600000000000000
episode: 1585
                score: 5.0
                              memory length: 381974
                                                       epsilon: 0.44168950001048557
                                                                                        steps: 295
                                                                                                       lr: 1.6000000000000000
episode: 1586
                score: 11.0
                               memory length: 382500
                                                        ensilon: 0.440648020010479
                                                                                        steps: 526
                                                                                                      lr: 1.600000000000000003
                score: 8.0
                              memory length: 382975
                                                       epsilon: 0.43970752001047303
                                                                                                       lr: 1.6000000000000000
episode: 1587
                                                                                        steps: 475
episode: 1588
                score: 9.0
                              memory length: 383452
                                                       epsilon: 0.43876306001046705
                                                                                        steps: 477
                                                                                                       episode: 1589
                score: 16.0
                               memory length: 384077
                                                        epsilon: 0.4375255600104592
                                                                                        steps: 625
                                                                                                       lr: 1.600000000000000
episode: 1590
                score: 10.0
                               memory length: 384581
                                                        epsilon: 0.4365276400104529
                                                                                        steps: 504
                                                                                                       lr: 1.6000000000000000
episode: 1591
                score: 3.0
                              memory length: 384812
                                                       epsilon: 0.43607026001045
                                                                                     steps: 231
                                                                                                        1.60000000000000003e-
                score: 6.0
episode: 1592
                              memory length: 385174
                                                       epsilon: 0.4353535000104455
                                                                                       steps: 362
                                                                                                      lr: 1.6000000000000000
episode: 1593
                score: 6.0
                              memory length: 385512
                                                       epsilon: 0.43468426001044125
                                                                                        steps: 338
                                                                                                       lr: 1.6000000000000000
                score: 7.0
                                                                                                       lr: 1.6000000000000000
episode: 1594
                                     length: 385952
                                                       epsilon: 0.43381306001043574
                              memory
                                                                                        steps: 440
episode: 1595
                score: 8.0
                                                       epsilon: 0.43323094001043205
                                                                                        steps: 294
                                                                                                       lr: 1.6000000000000000
                              memory length: 386246
episode: 1596
                              memory length: 386538
                                                                                        steps: 292
                score: 5.0
                                                       epsilon: 0.4326527800104284
                                                                                                      lr: 1.6000000000000000
episode: 1597
                score: 8.0
                              memory length: 386982
                                                       epsilon: 0.43177366001042283
                                                                                        steps: 444
                                                                                                       lr: 1.6000000000000000
episode: 1598
                score: 10.0
                               memory length: 387495
                                                        epsilon: 0.4307579200104164
                                                                                        steps: 513
                                                                                                       lr: 1.6000000000000000
```

```
score: 14.0
                              memory length: 388059
                                                        epsilon: 0.42964120001040934
                                                                                         steps: 564
                                                                                                        lr: 1.600000000000000
episode: 1599
episode: 1600
                score: 7.0
                              memory length: 388439
                                                       epsilon: 0.4288888000104046
                                                                                       steps: 380
                                                                                                      lr: 1.60000000000000000
episode: 1601
                                                        epsilon: 0.42774832001039736
                                                                                         steps: 576
                                                                                                        lr: 1.600000000000000
                score: 11.0
                               memory length: 389015
                                                                                        steps: 375
episode: 1602
                score: 7.0
                              memory length: 389390
                                                       epsilon: 0.42700582001039267
                                                                                                       memory length: 389984
episode: 1603
                score: 12.0
                                                        epsilon: 0.4258297000103852
                                                                                        steps: 594
                                                                                                       lr: 1.6000000000000000
                                                                                        steps: 420
episode: 1604
                score: 8.0
                              memory length: 390404
                                                       epsilon: 0.42499810001037996
                                                                                                       lr: 1.6000000000000000
                                                                                       steps: 355
episode: 1605
                score: 6.0
                              memory length: 390759
                                                       epsilon: 0.4242952000103755
                                                                                                      lr: 1.60000000000000003
                score: 9.0
                                                                                                       lr: 1.600000000000000
                                                       epsilon: 0.42338638001036977
                                                                                        steps: 459
episode: 1606
                              memory length: 391218
episode: 1607
                score: 14.0
                               memory length: 391759
                                                        epsilon: 0.422315200010363
                                                                                       steps: 541
                                                                                                      lr: 1.600000000000000003
                                                                                                       lr: 1.6000000000000000
episode: 1608
                score: 7.0
                              memory length: 392123
                                                       epsilon: 0.42159448001035843
                                                                                        steps: 364
                score: 9.0
                                                       epsilon: 0.4209450400103543
episode: 1609
                              memory length: 392451
                                                                                       steps: 328
                                                                                                      lr: 1.60000000000000003
                                                        epsilon: 0.419947120010348
episode: 1610
                score: 10.0
                               memory length: 392955
                                                                                       steps: 504
                                                                                                      lr: 1.60000000000000000
episode: 1611
                score: 10.0
                               memory length: 393430
                                                        epsilon: 0.41900662001034206
                                                                                         steps: 475
                                                                                                        lr: 1.600000000000000
episode: 1612
                score: 8.0
                              memory length: 393837
                                                       epsilon: 0.41820076001033696
                                                                                        steps: 407
                                                                                                       lr: 1.6000000000000000
episode: 1613
                score: 21.0
                              memory length: 394425
                                                                                        steps: 588
                                                        epsilon: 0.4170365200103296
                                                                                                       lr: 1.600000000000000
episode: 1614
                score: 6.0
                              memory length: 394766
                                                       epsilon: 0.4163613400103253
                                                                                       steps: 341
                                                                                                      lr: 1.60000000000000000
episode: 1615
                score: 4.0
                              memory length: 395010
                                                       epsilon: 0.41587822001032226
                                                                                        steps: 244
                                                                                                       lr: 1.6000000000000000
                score: 5.0
                                                                                       steps: 309
episode: 1616
                              memory length: 395319
                                                       epsilon: 0.4152664000103184
                                                                                                      lr: 1.6000000000000000
episode: 1617
                score: 7.0
                              memory length: 395724
                                                       epsilon: 0.4144645000103133
                                                                                       steps: 405
                                                                                                      lr: 1.60000000000000000
                score: 7.0
                              memory length: 396094
episode: 1618
                                                       epsilon: 0.4137319000103087
                                                                                       steps: 370
                                                                                                      lr: 1.60000000000000003
episode: 1619
                score: 11.0
                               memory length: 396613
                                                        epsilon: 0.4127042800103022
                                                                                        steps: 519
                                                                                                       lr: 1.6000000000000000
                              memory length: 396981
episode: 1620
                score: 7.0
                                                       epsilon: 0.4119756400102976
                                                                                       steps: 368
                                                                                                      lr: 1.60000000000000000
episode: 1621
                score: 5.0
                              memory length: 397306
                                                       epsilon: 0.4113321400102935
                                                                                       steps: 325
                                                                                                      lr: 1.6000000000000000
episode: 1622
                score: 10.0
                               memory length: 397860
                                                        epsilon: 0.41023522001028656
                                                                                         steps: 554
                                                                                                        lr: 1.600000000000000
episode: 1623
                score: 4.0
                                                       epsilon: 0.4097204200102833
                                                                                       steps: 260
                              memory length: 398120
                                                                                                      lr: 1.60000000000000003
                                                        epsilon: 0.4085858800102761
episode: 1624
                score: 11.0
                               memory length: 398693
                                                                                        steps: 573
                                                                                                       lr: 1.6000000000000000
                score: 5.0
                                                                                                      lr: 1.60000000000000003
episode: 1625
                              memory length: 398984
                                                       epsilon: 0.4080097000102725
                                                                                       steps: 291
episode: 1626
                score: 8.0
                              memory length: 399411
                                                       epsilon: 0.40716424001026713
                                                                                                       lr: 1.600000000000000
                                                                                        steps: 427
episode: 1627
                score: 9.0
                              memory length: 399906
                                                       epsilon: 0.40618414001026093
                                                                                        steps: 495
                                                                                                       lr: 1.6000000000000000
                              memory length: 400360
                                                       epsilon: 0.40528522001025524
episode: 1628
                score: 8.0
                                                                                        steps: 454
                                                                                                       lr: 6.4000000000000001
episode: 1629
                score: 15.0
                               memory length: 400856
                                                        epsilon: 0.40430314001024903
                                                                                         steps: 496
                                                                                                        lr: 6.400000000000000
                                                                                        steps: 325
episode: 1630
                score: 6.0
                              memory length: 401181
                                                       epsilon: 0.40365964001024496
                                                                                                       lr: 6.400000000000001
episode: 1631
                score: 8.0
                              memory length: 401559
                                                       epsilon: 0.4029112000102402
                                                                                       steps: 378
                                                                                                      lr: 6.4000000000000001e
episode: 1632
                score: 8.0
                              memory length: 401992
                                                       epsilon: 0.4020538600102348
                                                                                                      lr: 6.400000000000001e
                                                                                       steps: 433
                score: 8.0
episode: 1633
                              memory length: 402440
                                                       epsilon: 0.4011668200102292
                                                                                       steps: 448
                                                                                                      lr: 6.400000000000001e
episode: 1634
                score: 13.0
                              memory length: 402965
                                                        ensilon: 0.4001273200102226
                                                                                        steps: 525
                                                                                                       lr: 6.4000000000000001
episode: 1635
                score: 7.0
                              memory length: 403340
                                                       epsilon: 0.3993848200102179
                                                                                       steps: 375
                                                                                                      lr: 6.400000000000001e
episode: 1636
                score: 14.0
                               memory length: 403864
                                                        epsilon: 0.39834730001021135
                                                                                         steps: 524
                                                                                                        lr: 6.40000000000000
episode: 1637
                score: 8.0
                              memory length: 404293
                                                       epsilon: 0.397497880010206
                                                                                      steps: 429
                                                                                                     lr: 6.400000000000001e-
episode: 1638
                score: 9.0
                              memory length: 404773
                                                       epsilon: 0.39654748001019996
                                                                                        steps: 480
                                                                                                       lr: 6.4000000000000001
                                                        epsilon: 0.39578716001019515
                                                                                         steps: 384
                                                                                                        lr: 6.40000000000000
episode: 1639
                score: 13.0
                               memory length: 405157
                score: 9.0
episode: 1640
                              memory length: 405593
                                                       epsilon: 0.3949238800101897
                                                                                       steps: 436
                                                                                                      lr: 6.400000000000001e
episode: 1641
                score: 9.0
                              memory length: 406084
                                                       ensilon: 0.39395170001018354
                                                                                        steps: 491
                                                                                                       lr: 6.4000000000000001
                                                       epsilon: 0.39303496001017774
episode: 1642
                score: 9.0
                              memory length: 406547
                                                                                        steps: 463
                                                                                                       lr: 6.4000000000000001
episode: 1643
                score: 10.0
                               memory length: 407054
                                                        epsilon: 0.3920311000101714
                                                                                        steps: 507
                                                                                                       lr: 6.400000000000001
episode: 1644
                score: 11.0
                               memory length: 407625
                                                        epsilon: 0.39090052001016423
                                                                                         steps: 571
                                                                                                        lr: 6.40000000000000
episode: 1645
                score: 7.0
                              memory length: 408015
                                                       epsilon: 0.39012832001015935
                                                                                        steps: 390
                                                                                                       lr: 6.4000000000000001
episode: 1646
                score: 10.0
                               memory length: 408548
                                                        epsilon: 0.38907298001015267
                                                                                         steps: 533
                                                                                                        lr: 6.400000000000000
episode: 1647
                score: 14.0
                               memory length: 409036
                                                        epsilon: 0.38810674001014656
                                                                                         steps: 488
                                                                                                        lr: 6.400000000000000
episode: 1648
                              memory length: 409333
                                                                                        steps: 297
                score: 4.0
                                                       ensilon: 0.38751868001014284
                                                                                                       lr: 6.4000000000000001
                score: 8.0
                              memory length: 409750
episode: 1649
                                                       epsilon: 0.3866930200101376
                                                                                       steps: 417
                                                                                                      lr: 6.400000000000001e
episode: 1650
                score: 11.0
                               memory length: 410138
                                                        epsilon: 0.38592478001013275
                                                                                         steps: 388
                                                                                                        lr: 6.400000000000000
episode: 1651
                               memory length: 410637
                score: 13.0
                                                        epsilon: 0.3849367600101265
                                                                                        steps: 499
                                                                                                       lr: 6.4000000000000000
episode: 1652
                                                       epsilon: 0.3842912800101224
                score: 5.0
                              memory length: 410963
                                                                                       steps: 326
                                                                                                      lr: 6.4000000000000001e
episode: 1653
                score: 11.0
                               memory length: 411505
                                                        epsilon: 0.3832181200101156
                                                                                        steps: 542
                                                                                                       lr: 6.400000000000001
episode: 1654
                score: 9.0
                              memory length: 412011
                                                       epsilon: 0.3822162400101093
                                                                                       steps: 506
                                                                                                      lr: 6.400000000000001e
episode: 1655
                score: 12.0
                               memory length: 412570
                                                        ensilon: 0.3811094200101023
                                                                                        steps: 559
                                                                                                       lr: 6.4000000000000001
episode: 1656
                score: 8.0
                              memory length: 412997
                                                       epsilon: 0.38026396001009694
                                                                                                       lr: 6.400000000000001
                                                                                        steps: 427
episode: 1657
                score: 11.0
                               memory length: 413597
                                                        epsilon: 0.3790759600100894
                                                                                        steps: 600
                                                                                                       lr: 6.4000000000000001
episode: 1658
                score: 5.0
                              memory length: 413906
                                                       epsilon: 0.37846414001008555
                                                                                        steps: 309
                                                                                                       lr: 6.400000000000001
                score: 11.0
episode: 1659
                               memory length: 414399
                                                        epsilon: 0.37748800001007937
                                                                                         steps: 493
                                                                                                        lr: 6.40000000000000
episode: 1660
                score: 5.0
                              memory length: 414707
                                                       epsilon: 0.3768781600100755
                                                                                       steps: 308
                                                                                                      lr: 6.400000000000001e
                score: 7.0
episode: 1661
                              memory length: 415064
                                                       epsilon: 0.37617130001007104
                                                                                        steps: 357
                                                                                                       lr: 6.400000000000001
                              memory length: 415474
                                                       epsilon: 0.3753595000100659
episode: 1662
                score: 8.0
                                                                                       steps: 410
                                                                                                      lr: 6.4000000000000001e
episode: 1663
                score: 4.0
                              memory length: 415717
                                                       epsilon: 0.37487836001006286
                                                                                        steps: 243
                                                                                                       lr: 6.400000000000001
episode: 1664
                score: 12.0
                               memory length: 416247
                                                        epsilon: 0.3738289600100562
                                                                                        steps: 530
                                                                                                       lr: 6.400000000000001
episode: 1665
                               memory length: 416790
                                                                                        steps: 543
                score: 11.0
                                                        epsilon: 0.3727538200100494
                                                                                                       lr: 6.4000000000000000
episode: 1666
                                                                                       steps: 312
                score: 5.0
                              memory length: 417102
                                                       epsilon: 0.3721360600100455
                                                                                                      lr: 6.400000000000001e
episode: 1667
                score: 7.0
                              memory length: 417455
                                                       epsilon: 0.3714371200100411
                                                                                       steps: 353
                                                                                                      lr: 6.400000000000001e
                              memory length: 417757
                                                       epsilon: 0.3708391600100373
episode: 1668
                score: 6.0
                                                                                       steps: 302
                                                                                                      lr: 6.400000000000001e
episode: 1669
                                                       epsilon: 0.37000954001003206
                score: 8.0
                              memory length: 418176
                                                                                        steps: 419
                                                                                                       lr: 6.4000000000000001
                score: 10.0
                                                        epsilon: 0.3689898400100256
                                                                                        steps: 515
                                                                                                       lr: 6.400000000000001
episode: 1670
                               memory length: 418691
episode: 1671
                score: 5.0
                                                       epsilon: 0.36837802001002173
                              memory length: 419000
                                                                                        steps: 309
                                                                                                       lr: 6.4000000000000001
episode: 1672
                score: 8.0
                              memory length: 419435
                                                       ensilon: 0.3675167200100163
                                                                                       steps: 435
                                                                                                      lr: 6.4000000000000001e
                score: 15.0
                                                        epsilon: 0.3662515000100083
                                                                                                       lr: 6.400000000000001
episode: 1673
                               memory length: 420074
                                                                                        steps: 639
episode: 1674
                score: 8.0
                              memory length: 420504
                                                       epsilon: 0.3654001000100029
                                                                                       steps: 430
                                                                                                      lr: 6.400000000000001e
episode: 1675
                score: 15.0
                              memory length: 421079
                                                        epsilon: 0.3642616000099957
                                                                                        steps: 575
                                                                                                       lr: 6.400000000000001
episode: 1676
                score: 11.0
                               memory length: 421650
                                                        epsilon: 0.36313102000998854
                                                                                         steps: 571
                                                                                                        lr: 6.40000000000000
                                                                                                       lr: 6.400000000000001
episode: 1677
                score: 4.0
                              memory length: 421890
                                                       epsilon: 0.36265582000998553
                                                                                        steps: 240
episode: 1678
                score: 8.0
                                                                                       steps: 393
                              memory length: 422283
                                                       epsilon: 0.3618776800099806
                                                                                                      lr: 6.400000000000001e
episode: 1679
                score: 6.0
                              memory length: 422677
                                                       epsilon: 0.36109756000997567
                                                                                        steps: 394
                                                                                                       lr: 6.4000000000000001
                score: 10.0
                               memory length: 423161
                                                        epsilon: 0.3601392400099696
                                                                                                       lr: 6.4000000000000001
episode: 1680
                                                                                        steps: 484
                                                                                        steps: 347
episode: 1681
                score: 6.0
                              memory length: 423508
                                                       epsilon: 0.35945218000996526
                                                                                                       lr: 6.4000000000000000
episode: 1682
                                                        epsilon: 0.3582226000099575
                score: 14.0
                               memory length: 424129
                                                                                        steps: 621
                                                                                                       lr: 6.4000000000000000
                                                        engilon. 0 3571831000099509
                gcore: 10 0
                               memory length • 424654
                                                                                                           6 400000000000001
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ертропе: 1003
                PCOTE: IO.O
                               memory rengen: 424004
                                                        epsiton: 0.30/1031000077007
                                                                                        steps: 020
                                                                                                       TT: 0.400000000000000
episode: 1684
                score: 6.0
                              memory length: 425012
                                                       epsilon: 0.3564742600099464
                                                                                       steps: 358
                                                                                                      lr: 6.400000000000001e
                score: 4.0
                              memory length: 425295
                                                       epsilon: 0.3559139200099429
                                                                                       steps: 283
episode: 1685
                                                                                                      lr: 6.400000000000001e
episode: 1686
                score: 11.0
                               memory length: 425803
                                                        epsilon: 0.3549080800099365
                                                                                        steps: 508
                                                                                                       lr: 6.4000000000000001
episode: 1687
                score: 15.0
                               memory length: 426478
                                                        epsilon: 0.35357158000992805
                                                                                                        lr: 6.400000000000000
                                                                                         steps: 675
episode: 1688
                score: 10.0
                               memory length: 426948
                                                        epsilon: 0.35264098000992217
                                                                                         steps: 470
                                                                                                        lr: 6.400000000000000
episode: 1689
                score: 9.0
                              memory length: 427369
                                                       epsilon: 0.3518074000099169
                                                                                       steps: 421
                                                                                                      lr: 6.400000000000001e
episode: 1690
                score: 5.0
                              memory length: 427673
                                                       epsilon: 0.3512054800099131
                                                                                       steps: 304
                                                                                                      lr: 6.400000000000001e
episode: 1691
                score: 9.0
                              memory length: 428141
                                                       epsilon: 0.3502788400099072
                                                                                       steps: 468
                                                                                                      lr: 6.400000000000001e
                score: 11.0
                                                                                        steps: 440
episode: 1692
                               memory length: 428581
                                                        epsilon: 0.3494076400099017
                                                                                                       lr: 6.400000000000001
episode: 1693
                score: 17.0
                               memory length: 429084
                                                        ensilon: 0.3484117000098954
                                                                                        steps: 503
                                                                                                       lr: 6.4000000000000001
episode: 1694
                score: 6.0
                              memory length: 429387
                                                       epsilon: 0.3478117600098916
                                                                                       steps: 303
                                                                                                      lr: 6.400000000000001e
episode: 1695
                score: 7.0
                              memory length: 429776
                                                       epsilon: 0.34704154000988674
                                                                                        steps: 389
                                                                                                       lr: 6.400000000000001
episode: 1696
                score: 10.0
                               memory length: 430297
                                                        ensilon: 0.3460099600098802
                                                                                        steps: 521
                                                                                                       lr: 6.4000000000000001
episode: 1697
                score: 6.0
                              memory length: 430658
                                                       epsilon: 0.3452951800098757
                                                                                       steps: 361
                                                                                                      lr: 6.4000000000000001e
episode: 1698
                score: 7.0
                              memory length: 431054
                                                       epsilon: 0.34451110000987073
                                                                                        steps: 396
                                                                                                       lr: 6.400000000000001
episode: 1699
                score: 12.0
                               memory length: 431580
                                                        epsilon: 0.34346962000986414
                                                                                         steps: 526
                                                                                                        lr: 6.40000000000000
episode: 1700
                                                        epsilon: 0.34262020000985877
                score: 11.0
                               memory length: 432009
                                                                                         steps: 429
                                                                                                        1r: 6.400000000000000
episode: 1701
                score: 6.0
                                                                                      steps: 379
                                                                                                     lr: 6.400000000000001e-
                              memory length: 432388
                                                       epsilon: 0.341869780009854
episode: 1702
                score: 7.0
                              memory length: 432761
                                                       epsilon: 0.34113124000984935
                                                                                        steps: 373
                                                                                                       lr: 6.400000000000001
episode: 1703
                score: 14.0
                                                                                        steps: 620
                               memory length: 433381
                                                        epsilon: 0.3399036400098416
                                                                                                       lr: 6.4000000000000001
                                                                                         steps: 585
episode: 1704
                score: 13.0
                               memory length: 433966
                                                        epsilon: 0.33874534000983425
                                                                                                        lr: 6.40000000000000
episode: 1705
                score: 4.0
                              memory length: 434228
                                                       epsilon: 0.33822658000983097
                                                                                        steps: 262
                                                                                                       lr: 6.400000000000001
                score: 9.0
                                                                                        steps: 458
episode: 1706
                              memory length: 434686
                                                       epsilon: 0.33731974000982523
                                                                                                       lr: 6.4000000000000001
episode: 1707
                score: 10.0
                               memory length: 435235
                                                        epsilon: 0.33623272000981835
                                                                                         steps: 549
                                                                                                        lr: 6.40000000000000
episode: 1708
                score: 6.0
                              memory length: 435588
                                                       epsilon: 0.33553378000981393
                                                                                        steps: 353
                                                                                                       lr: 6.400000000000001
                score: 12.0
episode: 1709
                               memory length: 436145
                                                        epsilon: 0.33443092000980695
                                                                                         steps: 557
                                                                                                        lr: 6.400000000000000
episode: 1710
                score: 11.0
                               memory length: 436587
                                                        ensilon: 0.3335557600098014
                                                                                        steps: 442
                                                                                                       lr: 6.4000000000000001
                score: 10.0
episode: 1711
                               memory length: 437044
                                                        epsilon: 0.3326509000097957
                                                                                        steps: 457
                                                                                                       lr: 6.400000000000001
episode: 1712
                score: 11.0
                               memory
                                      length: 437575
                                                        epsilon: 0.33159952000978904
                                                                                         steps: 531
                                                                                                        lr: 6.400000000000000
                               memory length: 438172
                                                                                         steps: 597
episode: 1713
                score: 18.0
                                                        epsilon: 0.33041746000978156
                                                                                                        lr: 6.40000000000000
episode: 1714
                score: 10.0
                               memory length: 438546
                                                        epsilon: 0.3296769400097769
                                                                                        steps: 374
                                                                                                       lr: 6.400000000000001
episode: 1715
                score: 10.0
                               memorv
                                      length: 439026
                                                        epsilon: 0.32872654000977086
                                                                                         steps: 480
                                                                                                        lr: 6.400000000000000
episode: 1716
                                                        epsilon: 0.32766724000976416
                                                                                         steps: 535
                score: 10.0
                               memory length: 439561
                                                                                                        lr: 6.400000000000000
episode: 1717
                               memory length: 440163
                                                                                        steps: 602
                                                                                                       lr: 6.4000000000000001
                score: 21.0
                                                        epsilon: 0.3264752800097566
episode: 1718
                score: 13.0
                                                                                        steps: 536
                               memory length: 440699
                                                        epsilon: 0.3254140000097499
                                                                                                       lr: 6.400000000000001
episode: 1719
                score: 7.0
                              memory length: 441089
                                                       epsilon: 0.324641800009745
                                                                                      steps: 390
                                                                                                     lr: 6.400000000000001e-
episode: 1720
                score: 9.0
                              memory length: 441579
                                                       epsilon: 0.3236716000097389
                                                                                       steps: 490
                                                                                                      lr: 6.400000000000001e
episode: 1721
                score: 7.0
                              memory length: 441942
                                                       epsilon: 0.32295286000973433
                                                                                        steps: 363
                                                                                                       lr: 6.400000000000001
episode: 1722
                score: 8.0
                              memory length: 442374
                                                       epsilon: 0.3220975000097289
                                                                                       steps: 432
                                                                                                      lr: 6.400000000000001e
episode: 1723
                              memory length: 442712
                score: 6.0
                                                       epsilon: 0.3214282600097247
                                                                                       steps: 338
                                                                                                      lr: 6.4000000000000001e
episode: 1724
                                                        epsilon: 0.32023630000971715
                score: 18.0
                               memory length: 443314
                                                                                         steps: 602
                                                                                                        lr: 6.400000000000000
episode: 1725
                score: 16.0
                               memory length: 443934
                                                        epsilon: 0.3190087000097094
                                                                                        steps: 620
                                                                                                       lr: 6.4000000000000001
episode: 1726
                score: 11.0
                               memory length: 444508
                                                        epsilon: 0.3178721800097022
                                                                                        steps: 574
                                                                                                       lr: 6.4000000000000001
                score: 9.0
                                                       epsilon: 0.3169435600096963
                                                                                       steps: 469
episode: 1727
                              memory length: 444977
                                                                                                      lr: 6.4000000000000001e
episode: 1728
                score: 14.0
                               memory length: 445501
                                                        epsilon: 0.31590604000968975
                                                                                         steps: 524
                                                                                                        lr: 6.40000000000000
episode: 1729
                score: 15.0
                               memory length: 446138
                                                        epsilon: 0.31464478000968177
                                                                                         steps: 637
                                                                                                        lr: 6.400000000000000
                score: 7.0
episode: 1730
                              memory length: 446519
                                                       epsilon: 0.313890400009677
                                                                                      steps: 381
                                                                                                     lr: 6.400000000000001e-
episode: 1731
                score: 10.0
                               memory length: 447033
                                                        epsilon: 0.31287268000967056
                                                                                         steps: 514
                                                                                                        1r: 6.400000000000000
episode: 1732
                score: 14.0
                               memory length: 447545
                                                        epsilon: 0.31185892000966414
                                                                                         steps: 512
                                                                                                        lr: 6.40000000000000
episode: 1733
                score: 15.0
                               memory length: 448046
                                                        epsilon: 0.31086694000965787
                                                                                         steps: 501
                                                                                                        lr: 6.400000000000000
episode: 1734
                score: 10.0
                               memory length: 448512
                                                        epsilon: 0.30994426000965203
                                                                                         steps: 466
                                                                                                        lr: 6.400000000000000
episode: 1735
                              memory length: 449004
                score: 8.0
                                                       epsilon: 0.30897010000964586
                                                                                        steps: 492
                                                                                                       lr: 6.400000000000001
episode: 1736
                score: 11.0
                               memory length: 449525
                                                        epsilon: 0.30793852000963934
                                                                                         steps: 521
                                                                                                        lr: 6.40000000000000
episode: 1737
                score: 9.0
                              memory length: 449994
                                                       epsilon: 0.30700990000963346
                                                                                        steps: 469
                                                                                                       lr: 6.4000000000000001
episode: 1738
                                                        epsilon: 0.30583774000962605
                score: 12.0
                               memory length: 450586
                                                                                         steps: 592
                                                                                                        lr: 6.400000000000000
episode: 1739
                score: 10.0
                               memory length: 451076
                                                        epsilon: 0.3048675400096199
                                                                                        steps: 490
                                                                                                       lr: 6.400000000000001
episode: 1740
                score: 9.0
                              memory length: 451524
                                                       epsilon: 0.3039805000096143
                                                                                       steps: 448
                                                                                                      lr: 6.400000000000001e
episode: 1741
                                                       epsilon: 0.3032063200096094
                score: 8.0
                              memory length: 451915
                                                                                       steps: 391
                                                                                                      lr: 6.4000000000000001e
episode: 1742
                score: 13.0
                               memory length: 452530
                                                        epsilon: 0.3019886200096017
                                                                                                       lr: 6.400000000000001
                                                                                        steps: 615
episode: 1743
                               memory length: 453226
                                                        epsilon: 0.300610540009593
                                                                                                      lr: 6.400000000000001e
                score: 15.0
                                                                                       steps: 696
episode: 1744
                               memory length: 453734
                                                        epsilon: 0.2996047000095866
                score: 10.0
                                                                                        steps: 508
                                                                                                       lr: 6.400000000000001
episode: 1745
                score: 9.0
                              memory length: 454159
                                                       epsilon: 0.2987632000095813
                                                                                       steps: 425
                                                                                                      lr: 6.4000000000000001e
episode: 1746
                score: 7.0
                              memory length: 454507
                                                       epsilon: 0.2980741600095769
                                                                                       steps: 348
                                                                                                      lr: 6.400000000000001e
episode: 1747
                score: 12.0
                               memory length: 455104
                                                        epsilon: 0.29689210000956945
                                                                                         steps: 597
                                                                                                        lr: 6.400000000000000
episode: 1748
                score: 10.0
                               memory length: 455637
                                                        epsilon: 0.29583676000956277
                                                                                         steps: 533
                                                                                                        lr: 6.400000000000000
                score: 8.0
episode: 1749
                                                       epsilon: 0.2950645600095579
                                                                                       steps: 390
                                                                                                      lr: 6.400000000000001e
                              memory length: 456027
episode: 1750
                score: 12.0
                               memory length: 456608
                                                        epsilon: 0.2939141800095506
                                                                                        steps: 581
                                                                                                       lr: 6.400000000000001
episode: 1751
                score: 9.0
                              memory length: 457085
                                                       epsilon: 0.29296972000954463
                                                                                        steps: 477
                                                                                                       lr: 6.4000000000000001
episode: 1752
                score: 10.0
                               memory length: 457607
                                                        epsilon: 0.2919361600095381
                                                                                        steps: 522
                                                                                                           6.4000000000000000
                                                                                                       lr:
episode: 1753
                score: 14.0
                               memory length: 458222
                                                        epsilon: 0.2907184600095304
                                                                                        steps: 615
                                                                                                           6.400000000000001
episode: 1754
                score: 9.0
                              memory length: 458695
                                                       epsilon: 0.28978192000952446
                                                                                        steps: 473
                                                                                                           6.4000000000000001
                                                                                                       lr:
                score: 7.0
episode: 1755
                              memory length: 459096
                                                       ensilon: 0.28898794000951944
                                                                                        steps: 401
                                                                                                       lr: 6.4000000000000001
                score: 9.0
episode: 1756
                              memory length: 459552
                                                       epsilon: 0.2880850600095137
                                                                                       steps: 456
                                                                                                      lr: 6.400000000000001e
episode: 1757
                score: 12.0
                               memory length: 460070
                                                        epsilon: 0.28705942000950724
                                                                                         steps: 518
                                                                                                        lr: 6.400000000000000
episode: 1758
                score: 17.0
                               memory length: 460833
                                                        epsilon: 0.2855486800094977
                                                                                        steps: 763
                                                                                                       lr: 6.4000000000000001
episode: 1759
                score: 11.0
                               memory length: 461339
                                                        epsilon: 0.28454680000949134
                                                                                         steps: 506
                                                                                                        lr: 6.400000000000000
episode: 1760
                score: 12.0
                               memory length: 461917
                                                        epsilon: 0.2834023600094841
                                                                                        steps: 578
                                                                                                       lr: 6.400000000000001
episode: 1761
                score: 10.0
                               memory length: 462407
                                                        epsilon: 0.28243216000947796
                                                                                         steps: 490
                                                                                                        lr: 6.40000000000000
episode: 1762
                score: 18.0
                               memory length: 463042
                                                        epsilon: 0.28117486000947
                                                                                      steps: 635
                                                                                                     lr: 6.400000000000001e-
                                                                                        steps: 518
episode: 1763
                score: 11.0
                               memory
                                      length: 463560
                                                        epsilon: 0.2801492200094635
                                                                                                       lr: 6.400000000000001
                score: 21.0
episode: 1764
                               memory length: 464147
                                                        epsilon: 0.27898696000945616
                                                                                         steps: 587
                                                                                                        lr: 6.40000000000000
                                                                                        steps: 522
episode: 1765
                score: 10.0
                               memory length: 464669
                                                        ensilon: 0.2779534000094496
                                                                                                       lr: 6.4000000000000001
episode: 1766
                score: 16.0
                               memory length: 465186
                                                        epsilon: 0.27692974000944315
                                                                                         steps: 517
                                                                                                        lr: 6.40000000000000
episode: 1767
                score: 15.0
                               memory length: 465838
                                                        epsilon: 0.275638780009435
                                                                                        steps: 652
                                                                                                      lr: 6.400000000000001e
```

```
epsilon: 0.2746487800094287
                                                                                                       1r: 6.4000000000000001
episode: 1768
                score: 14.0
                               memory length: 466338
                                                                                         steps: 500
episode: 1769
                score: 11.0
                               memory length: 466842
                                                        epsilon: 0.2736508600094224
                                                                                         steps: 504
                                                                                                       lr: 6.4000000000000001
episode: 1770
                score: 8.0
                              memory length: 467258
                                                       epsilon: 0.2728271800094172
                                                                                        steps: 416
                                                                                                      lr: 6.400000000000001e
episode: 1771
                score: 7.0
                                                       epsilon: 0.27207478000941243
                              memory length: 467638
                                                                                         steps: 380
                                                                                                       lr: 6.4000000000000001
episode: 1772
                score: 12.0
                               memory length: 468079
                                                        epsilon: 0.2712016000094069
                                                                                         steps: 441
                                                                                                       lr: 6.4000000000000001
episode: 1773
                score: 16.0
                               memory length: 468783
                                                        epsilon: 0.2698076800093981
                                                                                         steps: 704
                                                                                                       lr: 6.4000000000000000
episode: 1774
                score: 8.0
                              memory length: 469204
                                                       epsilon: 0.2689741000093928
                                                                                        steps: 421
                                                                                                      lr: 6.400000000000001e
                               memory length: 469704
episode: 1775
                                                        epsilon: 0.26798410000938655
                score: 10.0
                                                                                          steps: 500
                                                                                                        lr: 6.40000000000000
episode: 1776
                score: 13.0
                               memory length: 470305
                                                        epsilon: 0.266794120009379
                                                                                        steps: 601
                                                                                                      lr: 6.400000000000001e
episode: 1777
                score: 10.0
                               memory length: 470812
                                                        epsilon: 0.26579026000937267
                                                                                          steps: 507
                                                                                                        lr: 6.400000000000000
                score: 12.0
episode: 1778
                               memory length: 471418
                                                        epsilon: 0.2645903800093651
                                                                                                       lr: 6.400000000000001
                                                                                         steps: 606
episode: 1779
                score: 14.0
                               memory length: 472051
                                                        ensilon: 0.26333704000935715
                                                                                          steps: 633
                                                                                                        lr: 6.400000000000000
episode: 1780
                 score: 13.0
                               memory length: 472652
                                                        epsilon: 0.2621470600093496
                                                                                         steps: 601
                                                                                                       lr: 6.400000000000001
episode: 1781
                score: 8.0
                              memory length: 473076
                                                       epsilon: 0.2613075400093443
                                                                                        steps: 424
                                                                                                      lr: 6.400000000000001e
                               memory length: 473648
episode: 1782
                score: 11.0
                                                        epsilon: 0.26017498000933714
                                                                                          steps: 572
                                                                                                        lr: 6.400000000000000
episode: 1783
                score: 14.0
                               memory length: 474231
                                                        epsilon: 0.25902064000932984
                                                                                          steps: 583
                                                                                                        lr: 6.400000000000000
episode: 1784
                score: 6.0
                              memory length: 474569
                                                       epsilon: 0.2583514000093256
                                                                                        steps: 338
                                                                                                      lr: 6.400000000000001e
                score: 25.0
episode: 1785
                               memory length: 475264
                                                        epsilon: 0.2569753000093169
                                                                                                       lr: 6.4000000000000001
                                                                                        steps: 695
episode: 1786
                score: 9.0
                              memory length: 475738
                                                       ensilon: 0.25603678000931096
                                                                                         steps: 474
                                                                                                       lr: 6.4000000000000001
                score: 14.0
                                                        epsilon: 0.2550170800093045
                                                                                                       lr: 6.4000000000000000
episode: 1787
                               memory length: 476253
                                                                                         steps: 515
                score: 5.0
                                                                                        steps: 289
episode: 1788
                              memory length: 476542
                                                       epsilon: 0.2544448600093009
                                                                                                      lr: 6.400000000000001e
                               memory length: 477195
episode: 1789
                score: 19.0
                                                        epsilon: 0.2531519200092927
                                                                                         steps: 653
                                                                                                       lr: 6.4000000000000001
episode: 1790
                score: 14.0
                               memory length: 477798
                                                        epsilon: 0.25195798000928515
                                                                                                        lr: 6.40000000000000
                                                                                          steps: 603
                              memory length: 478202
episode: 1791
                score: 7.0
                                                       epsilon: 0.2511580600092801
                                                                                        steps: 404
                                                                                                      lr: 6.400000000000001e
episode: 1792
                score: 4.0
                              memory length: 478483
                                                       epsilon: 0.2506016800092766
                                                                                        steps: 281
                                                                                                      lr: 6.400000000000001e
episode: 1793
                score: 10.0
                               memory length: 478983
                                                        epsilon: 0.2496116800092703
                                                                                         steps: 500
                                                                                                       lr: 6.4000000000000001
                               memory length: 479616
episode: 1794
                score: 14.0
                                                        epsilon: 0.24835834000926238
                                                                                          steps: 633
                                                                                                        lr: 6.40000000000000
episode: 1795
                score: 7.0
                              memory length: 479985
                                                       epsilon: 0.24762772000925776
                                                                                         steps: 369
                                                                                                       lr: 6.400000000000001
episode: 1796
                score: 12.0
                               memory length: 480463
                                                        ensilon: 0.24668128000925177
                                                                                          steps: 478
                                                                                                        lr: 6.400000000000000
                                                        epsilon: 0.2456417800092452
                 score: 10.0
                                                                                         steps: 525
                                                                                                       lr: 6.400000000000001
episode: 1797
                               memory length: 480988
episode: 1798
                score: 5.0
                              memory length: 481314
                                                       epsilon: 0.2449963000092411
                                                                                        steps: 326
                                                                                                      lr: 6.400000000000001e
episode: 1799
                               memory length: 481770
                                                        epsilon: 0.2440934200092354
                score: 11.0
                                                                                         steps: 456
                                                                                                       lr: 6.400000000000001
episode: 1800
                score: 12.0
                               memory length: 482337
                                                        epsilon: 0.2429707600092283
                                                                                         steps: 567
                                                                                                       lr: 6.4000000000000001
episode: 1801
                score: 11.0
                               memory length: 482894
                                                        epsilon: 0.24186790000922131
                                                                                          steps: 557
                                                                                                        lr: 6.40000000000000
episode: 1802
                score: 7.0
                              memory length: 483281
                                                       epsilon: 0.24110164000921647
                                                                                         steps: 387
                                                                                                       lr: 6.400000000000001
episode: 1803
                score: 12.0
                                                                                         steps: 547
                               memory length: 483828
                                                        epsilon: 0.24001858000920961
                                                                                                        lr: 6.400000000000000
episode: 1804
                score: 9.0
                              memory length: 484305
                                                       epsilon: 0.23907412000920364
                                                                                         steps: 477
                                                                                                       lr: 6.400000000000001
episode: 1805
                score: 8.0
                              memory length: 484728
                                                       epsilon: 0.23823658000919834
                                                                                         steps: 423
                                                                                                       lr: 6.400000000000001
                               memory length: 485214
episode: 1806
                score: 16.0
                                                        epsilon: 0.23727430000919225
                                                                                         steps: 486
                                                                                                        lr: 6.40000000000000
episode: 1807
                score: 3.0
                              memory length: 485447
                                                       epsilon: 0.23681296000918933
                                                                                         steps: 233
                                                                                                       lr: 6.4000000000000001
episode: 1808
                score: 13.0
                               memory length: 486028
                                                        epsilon: 0.23566258000918205
                                                                                          steps: 581
                                                                                                        lr: 6.400000000000000
episode: 1809
                score: 15.0
                               memory length: 486603
                                                        epsilon: 0.23452408000917485
                                                                                          steps: 575
                                                                                                        lr: 6.400000000000000
episode: 1810
                score: 10.0
                               memory length: 487067
                                                        ensilon: 0.23360536000916904
                                                                                          steps: 464
                                                                                                        lr: 6.400000000000000
episode: 1811
                score: 10.0
                               memory length: 487548
                                                        epsilon: 0.232652980009163
                                                                                        steps: 481
                                                                                                      lr: 6.400000000000001e
episode: 1812
                               memory length: 488218
                                                        epsilon: 0.23132638000915462
                score: 14.0
                                                                                         steps: 670
                                                                                                        lr: 6.400000000000000
                                                                                         steps: 468
episode: 1813
                score: 9.0
                              memory length: 488686
                                                       epsilon: 0.23039974000914876
                                                                                                       lr: 6.4000000000000001
episode: 1814
                score: 11.0
                               memory length: 489235
                                                        epsilon: 0.22931272000914188
                                                                                          steps: 549
                                                                                                        lr: 6.400000000000000
episode: 1815
                score: 15.0
                               memory length: 489883
                                                        epsilon: 0.22802968000913376
                                                                                          steps: 648
                                                                                                        lr: 6.400000000000000
                score: 9.0
episode: 1816
                              memory length: 490338
                                                       epsilon: 0.22712878000912806
                                                                                         steps: 455
                                                                                                       lr: 6.400000000000001
episode: 1817
                score: 8.0
                              memory length: 490704
                                                       ensilon: 0.22640410000912348
                                                                                         steps: 366
                                                                                                       lr: 6.4000000000000001
episode: 1818
                score: 22.0
                               memory length: 491556
                                                        epsilon: 0.2247171400091128
                                                                                         steps: 852
                                                                                                       lr: 6.400000000000001
episode: 1819
                score: 5.0
                              memory length: 491879
                                                       epsilon: 0.22407760000910876
                                                                                         steps: 323
                                                                                                       lr: 6.400000000000001
episode: 1820
                              memory length: 492130
                score: 3.0
                                                       epsilon: 0.2235806200091056
                                                                                        steps: 251
                                                                                                      lr: 6.400000000000001e
episode: 1821
                score: 11.0
                               memory length: 492659
                                                        epsilon: 0.22253320000909899
                                                                                          steps: 529
                                                                                                        lr: 6.400000000000000
episode: 1822
                score: 13.0
                               memory length: 493275
                                                        epsilon: 0.22131352000909127
                                                                                          steps: 616
                                                                                                        lr: 6.400000000000000
                score: 10.0
episode: 1823
                               memory length: 493821
                                                        epsilon: 0.22023244000908443
                                                                                          steps: 546
                                                                                                        lr: 6.400000000000000
episode: 1824
                score: 12.0
                               memory length: 494386
                                                        epsilon: 0.21911374000907735
                                                                                          steps: 565
                                                                                                        lr: 6.400000000000000
                               memory length: 494986
                 score: 15.0
                                                        epsilon: 0.21792574000906983
                                                                                          steps: 600
                                                                                                        lr: 6.400000000000000
episode: 1825
episode: 1826
                              memory length: 495350
                                                       epsilon: 0.21720502000906527
                score: 6.0
                                                                                         steps: 364
                                                                                                       lr: 6.400000000000001
episode: 1827
                score: 15.0
                               memory length: 496022
                                                        epsilon: 0.21587446000905686
                                                                                          steps: 672
                                                                                                        lr: 6.400000000000000
episode: 1828
                score: 14.0
                               memory length: 496544
                                                        epsilon: 0.21484090000905032
                                                                                          steps: 522
                                                                                                        lr: 6.400000000000000
episode: 1829
                score: 12.0
                               memory length: 497141
                                                        epsilon: 0.21365884000904284
                                                                                          steps: 597
                                                                                                        lr: 6.400000000000000
                               memory length: 497890
                                                                                          steps: 749
episode: 1830
                score: 20.0
                                                        epsilon: 0.21217582000903346
                                                                                                        lr: 6.40000000000000
episode: 1831
                score: 10.0
                               memory length: 498376
                                                        epsilon: 0.21121354000902737
                                                                                          steps: 486
                                                                                                        1r: 6.400000000000000
episode: 1832
                score: 12.0
                               memory
                                      length: 498969
                                                        epsilon: 0.21003940000901994
                                                                                          steps: 593
                                                                                                        lr: 6.40000000000000
episode: 1833
                score: 16.0
                               memory length: 499596
                                                        epsilon: 0.20879794000901208
                                                                                          steps: 627
                                                                                                        lr: 6.40000000000000
                               memory length: 500065
                                                                                         steps: 469
episode: 1834
                score: 10.0
                                                        epsilon: 0.2078693200090062
                                                                                                       lr: 2.5600000000000001
                                      length: 500652
                                                                                          steps: 587
episode: 1835
                score: 13.0
                                                        epsilon: 0.20670706000899886
                                                                                                        lr: 2.560000000000000
episode: 1836
                score: 18.0
                               memory length: 501223
                                                        epsilon: 0.2055764800089917
                                                                                         steps: 571
                                                                                                       lr: 2.5600000000000001
episode: 1837
                               memory length: 501832
                score: 14.0
                                                        epsilon: 0.20437066000898407
                                                                                          steps: 609
                                                                                                        lr: 2.560000000000000
episode: 1838
                score: 10.0
                                      length: 502326
                                                        epsilon: 0.20339254000897788
                                                                                          steps: 494
                                                                                                        lr: 2.560000000000000
                               memory
                               memory length: 502895
                                                                                          steps: 569
episode: 1839
                score: 11.0
                                                        epsilon: 0.20226592000897076
                                                                                                        lr: 2.560000000000000
episode: 1840
                score: 12.0
                               memory length: 503472
                                                        epsilon: 0.20112346000896353
                                                                                          steps: 577
                                                                                                        lr: 2.560000000000000
episode: 1841
                score: 15.0
                               memory length: 504116
                                                        ensilon: 0.19984834000895546
                                                                                          steps: 644
                                                                                                        1r: 2.560000000000000
                 score: 10.0
                                                                                                       lr: 2.5600000000000001
episode: 1842
                               memory length: 504599
                                                        epsilon: 0.1988920000089494
                                                                                         steps: 483
episode: 1843
                score: 13.0
                               memory length: 505207
                                                        epsilon: 0.1976881600089418
                                                                                        steps: 608
                                                                                                       1r: 2.5600000000000001
episode: 1844
                score: 9.0
                              memory length: 505678
                                                       epsilon: 0.1967555800089359
                                                                                        steps: 471
                                                                                                      lr: 2.5600000000000001e
episode: 1845
                score: 16.0
                               memory length: 506249
                                                        epsilon: 0.19562500000892874
                                                                                          steps: 571
                                                                                                        lr: 2.560000000000000
episode: 1846
                score: 8.0
                              memory length: 506703
                                                       epsilon: 0.19472608000892305
                                                                                         steps: 454
                                                                                                       lr: 2.5600000000000001
                                                        epsilon: 0.19374598000891685
episode: 1847
                score: 10.0
                               memory length: 507198
                                                                                         steps: 495
                                                                                                        lr: 2.560000000000000
episode: 1848
                                                        epsilon: 0.19247878000890883
                score: 12.0
                               memory length: 507838
                                                                                          steps: 640
                                                                                                        lr: 2.560000000000000
episode: 1849
                score: 15.0
                               memory length: 508411
                                                        epsilon: 0.19134424000890166
                                                                                          steps: 573
                                                                                                        lr: 2.560000000000000
episode: 1850
                score: 13.0
                               memory length: 508931
                                                        epsilon: 0.19031464000889514
                                                                                          steps: 520
                                                                                                        lr: 2.560000000000000
                                                                                        steps: 323
episode: 1851
                score: 6.0
                              memory length: 509254
                                                       epsilon: 0.1896751000088911
                                                                                                      lr: 2.5600000000000001e
episode: 1852
                score: 16.0
                               memory length: 509832
                                                        epsilon: 0.18853066000888385
                                                                                          steps: 578
                                                                                                        lr: 2.560000000000000
```

```
episode: 1853
                                                        epsilon: 0.18726742000887586
                                                                                                        lr: 2.56000000000000
                score: 14.0
                               memory length: 510470
                                                                                          steps: 638
episode: 1854
                score: 15.0
                               memory length: 511109
                                                        epsilon: 0.18600220000886786
                                                                                          steps: 639
                                                                                                        lr: 2.560000000000000
episode: 1855
                                                        epsilon: 0.1849033000088609
                score: 11.0
                               memory length: 511664
                                                                                         steps: 555
                                                                                                       lr: 2.5600000000000001
                                                        epsilon: 0.18364402000885294
episode: 1856
                                      length: 512300
                                                                                                        lr: 2.56000000000000
                score: 16.0
                                                                                          steps: 636
episode: 1857
                score: 12.0
                               memory length: 512765
                                                        epsilon: 0.1827233200088471
                                                                                         steps: 465
                                                                                                       lr: 2.5600000000000001
episode: 1858
                               memory length: 513319
                                                                                         steps: 554
                                                                                                        1r: 2.560000000000000
                score: 11.0
                                                        epsilon: 0.18162640000884017
episode: 1859
                score: 12.0
                               memory length: 513763
                                                        epsilon: 0.1807472800088346
                                                                                         steps: 444
                                                                                                       lr: 2.5600000000000000
episode: 1860
                score: 11.0
                               memory length: 514273
                                                        epsilon: 0.17973748000882822
                                                                                         steps: 510
                                                                                                        lr: 2.560000000000000
episode: 1861
                score: 17.0
                               memory length: 514874
                                                        epsilon: 0.1785475000088207
                                                                                         steps: 601
                                                                                                       lr: 2.5600000000000001
episode: 1862
                score: 10.0
                               memory length: 515364
                                                        epsilon: 0.17757730000881455
                                                                                          steps: 490
                                                                                                        lr: 2.560000000000000
episode: 1863
                score: 7.0
                              memory length: 515733
                                                       epsilon: 0.17684668000880993
                                                                                         steps: 369
                                                                                                       lr: 2.5600000000000001
episode: 1864
                score: 8.0
                              memory length: 516151
                                                       epsilon: 0.1760190400088047
                                                                                        steps: 418
                                                                                                       lr: 2.5600000000000001e
episode: 1865
                score: 12.0
                               memory length: 516622
                                                        ensilon: 0.1750864600087988
                                                                                         steps: 471
                                                                                                       lr: 2.5600000000000001
                score: 13.0
                                                        epsilon: 0.17406874000879236
episode: 1866
                               memory length: 517136
                                                                                          steps: 514
                                                                                                        lr: 2.560000000000000
episode: 1867
                score: 11.0
                               memory length: 517564
                                                        epsilon: 0.173221300008787
                                                                                        steps: 428
                                                                                                      lr: 2.5600000000000001e
                               memory length: 518092
episode: 1868
                score: 12.0
                                                        epsilon: 0.17217586000878038
                                                                                          steps: 528
                                                                                                        lr: 2.560000000000000
episode: 1869
                score: 19.0
                               memory length: 518912
                                                        epsilon: 0.1705522600087701
                                                                                         steps: 820
                                                                                                       lr: 2.5600000000000000
episode: 1870
                score: 12.0
                                      length: 519469
                                                        epsilon: 0.16944940000876313
                                                                                          steps: 557
                                                                                                        lr: 2.56000000000000
episode: 1871
                score: 21.0
                               memory length: 520118
                                                        epsilon: 0.168164380008755
                                                                                        steps: 649
                                                                                                      lr: 2.560000000000001e
                                                                                          steps: 555
episode: 1872
                score: 11.0
                               memory length: 520673
                                                        ensilon: 0.16706548000874805
                                                                                                        lr: 2.560000000000000
                                                                                          steps: 620
episode: 1873
                score: 17.0
                               memory length: 521293
                                                        epsilon: 0.16583788000874028
                                                                                                        lr: 2.560000000000000
episode: 1874
                score: 11.0
                               memory length: 521812
                                                        epsilon: 0.16481026000873378
                                                                                          steps: 519
                                                                                                        lr: 2.560000000000000
episode: 1875
                score: 10.0
                               memory length: 522282
                                                        epsilon: 0.1638796600087279
                                                                                         steps: 470
                                                                                                       lr: 2.5600000000000001
episode: 1876
                score: 17.0
                               memory length: 523011
                                                        epsilon: 0.16243624000871876
                                                                                          steps: 729
                                                                                                        lr: 2.56000000000000
episode: 1877
                score: 13.0
                               memory length: 523623
                                                        epsilon: 0.1612244800087111
                                                                                         steps: 612
                                                                                                       lr: 2.5600000000000001
episode: 1878
                score: 8.0
                                                       epsilon: 0.16048000000870638
                                                                                         steps: 376
                                                                                                       lr: 2.5600000000000001
                              memory length: 523999
episode: 1879
                score: 11.0
                               memory length: 524469
                                                        epsilon: 0.1595494000087005
                                                                                         steps: 470
                                                                                                       lr: 2.5600000000000000
episode: 1880
                score: 8.0
                              memory length: 524888
                                                       epsilon: 0.15871978000869524
                                                                                         steps: 419
                                                                                                       lr: 2.5600000000000001
episode: 1881
                score: 7.0
                              memory length: 525311
                                                       epsilon: 0.15788224000868994
                                                                                         steps: 423
                                                                                                       lr: 2.5600000000000000
episode: 1882
                score: 9.0
                              memory length: 525776
                                                       epsilon: 0.15696154000868412
                                                                                         steps: 465
                                                                                                       lr: 2.5600000000000000
                                                                                                      lr: 2.5600000000000001e
episode: 1883
                score: 7.0
                              memory length: 526200
                                                       epsilon: 0.1561220200086788
                                                                                        steps: 424
episode: 1884
                score: 11.0
                               memory length: 526679
                                                        epsilon: 0.1551736000086728
                                                                                         steps: 479
                                                                                                       lr: 2.560000000000001
episode: 1885
                score: 17.0
                               memory length: 527265
                                                        epsilon: 0.15401332000866547
                                                                                         steps: 586
                                                                                                        lr: 2.560000000000000
episode: 1886
                score: 8.0
                              memory length: 527671
                                                       epsilon: 0.15320944000866038
                                                                                         steps: 406
                                                                                                       lr: 2.5600000000000001
                                                        epsilon: 0.15220360000865402
                                                                                                        lr: 2.560000000000000
episode: 1887
                score: 10.0
                               memory length: 528179
                                                                                          steps: 508
                score: 24.0
                               memory length: 528918
                                                        epsilon: 0.15074038000864476
                                                                                          steps: 739
episode: 1888
                                                                                                        lr: 2.560000000000000
episode: 1889
                               memory length: 529444
                                                        epsilon: 0.14969890000863817
                                                                                          steps: 526
                                                                                                        lr: 2.560000000000000
                score: 12.0
                score: 14.0
episode: 1890
                               memory length: 529974
                                                        epsilon: 0.14864950000863153
                                                                                          steps: 530
                                                                                                        lr: 2.560000000000000
episode: 1891
                score: 9.0
                              memory length: 530447
                                                       epsilon: 0.1477129600086256
                                                                                        steps: 473
                                                                                                      lr: 2.5600000000000001e
                score: 8.0
                              memory length: 530855
episode: 1892
                                                       epsilon: 0.1469051200086205
                                                                                        steps: 408
                                                                                                      lr: 2.560000000000001e
episode: 1893
                score: 8.0
                              memory length: 531288
                                                       epsilon: 0.14604778000861507
                                                                                         steps: 433
                                                                                                       lr: 2.5600000000000001
episode: 1894
                score: 14.0
                               memory length: 531918
                                                        epsilon: 0.14480038000860718
                                                                                          steps: 630
                                                                                                        lr: 2.560000000000000
episode: 1895
                score: 11.0
                               memory length: 532532
                                                        epsilon: 0.14358466000859949
                                                                                          steps: 614
                                                                                                        lr: 2.560000000000000
episode: 1896
                score: 14.0
                               memory length: 533167
                                                        ensilon: 0.14232736000859153
                                                                                          steps: 635
                                                                                                        lr: 2.560000000000000
episode: 1897
                score: 15.0
                               memory length: 533841
                                                        epsilon: 0.1409928400085831
                                                                                         steps: 674
                                                                                                       lr: 2.560000000000001
episode: 1898
                score: 13.0
                               memory length: 534474
                                                        epsilon: 0.13973950000857516
                                                                                          steps: 633
                                                                                                        lr: 2.560000000000000
                               memory length: 534970
                                                                                          steps: 496
episode: 1899
                score: 10.0
                                                        epsilon: 0.13875742000856894
                                                                                                        lr: 2.560000000000000
episode: 1900
                score: 12.0
                               memory length: 535577
                                                        epsilon: 0.13755556000856134
                                                                                          steps: 607
                                                                                                        1r: 2.560000000000000
                score: 5.0
episode: 1901
                              memory length: 535923
                                                        epsilon: 0.136870480008557
                                                                                       steps: 346
                                                                                                     lr: 2.560000000000001e-
                                                        epsilon: 0.13578148000855012
                                                                                          steps: 550
episode: 1902
                score: 12.0
                               memory length: 536473
                                                                                                        lr: 2.560000000000000
episode: 1903
                score: 7.0
                              memory length: 536895
                                                       ensilon: 0.13494592000854483
                                                                                         steps: 422
                                                                                                       lr: 2.5600000000000001
episode: 1904
                score: 10.0
                               memory length: 537401
                                                        epsilon: 0.1339440400085385
                                                                                         steps: 506
                                                                                                       lr: 2.5600000000000001
episode: 1905
                score: 11.0
                               memory length: 537979
                                                        epsilon: 0.13279960000853125
                                                                                          steps: 578
                                                                                                        lr: 2.560000000000000
                               memory length: 538520
episode: 1906
                                                                                          steps: 541
                score: 12.0
                                                        epsilon: 0.13172842000852447
                                                                                                        lr: 2.560000000000000
episode: 1907
                score: 17.0
                               memory length: 539292
                                                        epsilon: 0.1301998600085148
                                                                                         steps: 772
                                                                                                       lr: 2.5600000000000001
episode: 1908
                score: 9.0
                              memory length: 539732
                                                       epsilon: 0.1293286600085093
                                                                                        steps: 440
                                                                                                      lr: 2.5600000000000001e
episode: 1909
                score: 8.0
                              memory length: 540143
                                                       epsilon: 0.12851488000850414
                                                                                         steps: 411
                                                                                                       lr: 2.5600000000000001
                                                       epsilon: 0.127703080008499
episode: 1910
                score: 9.0
                              memory length: 540553
                                                                                       steps: 410
                                                                                                     lr: 2.560000000000001e-
episode: 1911
                score: 13.0
                               memory length: 541204
                                                        epsilon: 0.12641410000849085
                                                                                          steps: 651
                                                                                                        lr: 2.560000000000000
episode: 1912
                score: 14.0
                               memory length: 541874
                                                        epsilon: 0.12508750000848246
                                                                                          steps: 670
                                                                                                        lr: 2.560000000000000
episode: 1913
                score: 9.0
                              memory length: 542395
                                                       epsilon: 0.12405592000848255
                                                                                         steps: 521
                                                                                                       lr: 2.5600000000000000
episode: 1914
                score: 21.0
                               memory length: 543098
                                                        epsilon: 0.1226639800084835
                                                                                         steps: 703
                                                                                                       lr: 2.5600000000000001
episode: 1915
                score: 15.0
                               memory length: 543658
                                                        epsilon: 0.12155518000848425
                                                                                         steps: 560
                                                                                                        lr: 2.560000000000000
episode: 1916
                score: 9.0
                              memory length: 544159
                                                       epsilon: 0.12056320000848493
                                                                                         steps: 501
                                                                                                       lr: 2.5600000000000001
episode: 1917
                score: 11.0
                               memory length: 544738
                                                        epsilon: 0.11941678000848571
                                                                                          steps: 579
                                                                                                        lr: 2.560000000000000
episode: 1918
                                      length: 545203
                score: 10.0
                               memory
                                                        epsilon: 0.11849608000848634
                                                                                          steps: 465
                                                                                                        lr: 2.560000000000000
                               memory length: 545995
                                                                                          steps: 792
episode: 1919
                score: 18.0
                                                        epsilon: 0.11692792000848741
                                                                                                        lr: 2.560000000000000
episode: 1920
                score: 23.0
                               memory length: 546809
                                                        epsilon: 0.11531620000848851
                                                                                          steps: 814
                                                                                                        lr: 2.560000000000000
                score: 10.0
episode: 1921
                               memory length: 547282
                                                        epsilon: 0.11437966000848915
                                                                                          steps: 473
                                                                                                        lr: 2.560000000000000
episode: 1922
                score: 9.0
                              memory length: 547787
                                                       epsilon: 0.11337976000848983
                                                                                         steps: 505
                                                                                                       lr: 2.5600000000000001
episode: 1923
                score: 14.0
                               memory length: 548373
                                                        epsilon: 0.11221948000849062
                                                                                         steps: 586
                                                                                                        lr: 2.560000000000000
episode: 1924
                score: 14.0
                               memory length: 548878
                                                        epsilon: 0.1112195800084913
                                                                                         steps: 505
                                                                                                       lr: 2.5600000000000000
                                                                                        steps: 518
episode: 1925
                score: 10.0
                               memory length: 549396
                                                        epsilon: 0.110193940008492
                                                                                                      lr: 2.560000000000001e
episode: 1926
                score: 16.0
                               memory length: 550096
                                                        epsilon: 0.10880794000849295
                                                                                          steps: 700
                                                                                                        lr: 2.560000000000000
                               memory length: 550605
episode: 1927
                score: 10.0
                                                        epsilon: 0.10780012000849364
                                                                                          steps: 509
                                                                                                        lr: 2.560000000000000
                score: 12.0
episode: 1928
                               memory length: 551188
                                                        epsilon: 0.10664578000849442
                                                                                          steps: 583
                                                                                                        lr: 2.560000000000000
episode: 1929
                score: 13.0
                               memory length: 551844
                                                        epsilon: 0.10534690000849531
                                                                                          steps: 656
                                                                                                        lr: 2.560000000000000
                                                                                          steps: 486
                score: 10.0
episode: 1930
                               memory length: 552330
                                                        epsilon: 0.10438462000849597
                                                                                                        lr: 2.560000000000000
episode: 1931
                score: 12.0
                               memory length: 552768
                                                        epsilon: 0.10351738000849656
                                                                                          steps: 438
                                                                                                        lr: 2.560000000000000
episode: 1932
                score: 16.0
                               memory length: 553390
                                                        epsilon: 0.1022858200084974
                                                                                         steps: 622
                                                                                                       lr: 2.5600000000000001
episode: 1933
                score: 9.0
                              memory length: 553883
                                                       epsilon: 0.10130968000849806
                                                                                         steps: 493
                                                                                                       lr: 2.5600000000000001
episode: 1934
                score: 11.0
                               memory length: 554440
                                                        epsilon: 0.10020682000849881
                                                                                          steps: 557
                                                                                                        lr: 2.560000000000000
episode: 1935
                                                        epsilon: 0.09893170000849968
                                                                                                        lr: 2.560000000000000
                score: 16.0
                               memory length: 555084
                                                                                          steps: 644
episode: 1936
                score: 13.0
                               memory length: 555703
                                                        epsilon: 0.09770608000850052
                                                                                          steps: 619
                                                                                                        lr: 2.560000000000000
                               memory length: 556325
                                                        epsilon: 0.09647452000850136
                                                                                          steps: 622
                                                                                                        lr: 2.560000000000000
episode: 1937
                score: 14.0
```

```
score: 12.0
episode: 1938
                               memory length: 556817
                                                        epsilon: 0.09550036000850202
                                                                                          steps: 492
                                                                                                         lr: 2.560000000000000
episode: 1939
                 score: 11.0
                               memory length: 557351
                                                        epsilon: 0.09444304000850275
                                                                                          steps: 534
                                                                                                         lr: 2.56000000000000
                                                        epsilon: 0.09366688000850328
episode: 1940
                score: 11.0
                               memory length: 557743
                                                                                          steps: 392
                                                                                                         lr: 2.560000000000000
episode: 1941
                                                        ensilon: 0.09242542000850412
                                                                                          steps: 627
                score: 12.0
                               memory length: 558370
                                                                                                         1r: 2.560000000000000
episode: 1942
                score: 14.0
                               memory length: 558872
                                                        epsilon: 0.0914314600085048
                                                                                         steps: 502
                                                                                                        lr: 2.560000000000001
episode: 1943
                score: 10.0
                               memory length: 559354
                                                        epsilon: 0.09047710000850545
                                                                                          steps: 482
                                                                                                        lr: 2.56000000000000
                                                                                          steps: 736
episode: 1944
                score: 22.0
                               memory length: 560090
                                                        epsilon: 0.08901982000850645
                                                                                                         lr: 2.560000000000000
episode: 1945
                score: 11.0
                               memory length: 560672
                                                        epsilon: 0.08786746000850723
                                                                                          steps: 582
                                                                                                         lr: 2.560000000000000
episode: 1946
                score: 5.0
                              memory length: 561004
                                                       epsilon: 0.08721010000850768
                                                                                         steps: 332
                                                                                                        lr: 2.5600000000000001
episode: 1947
                score: 14.0
                               memory length: 561537
                                                        epsilon: 0.0861547600085084
                                                                                         steps: 533
                                                                                                        lr: 2.5600000000000001
                                                        epsilon: 0.08523802000850902
episode: 1948
                score: 11.0
                               memory length: 562000
                                                                                          steps: 463
                                                                                                        lr: 2.560000000000000
                score: 18.0
                               memory length: 562612
                                                        epsilon: 0.08402626000850985
                                                                                          steps: 612
episode: 1949
                                                                                                         lr: 2.560000000000000
episode: 1950
                score: 8.0
                              memory length: 563074
                                                       epsilon: 0.08311150000851047
                                                                                         steps: 462
                                                                                                        lr: 2.5600000000000000
episode: 1951
                score: 11.0
                               memory length: 563613
                                                        epsilon: 0.0820442800085112
                                                                                         steps: 539
                                                                                                        lr: 2.5600000000000001
episode: 1952
                score: 16.0
                               memory length: 564188
                                                        epsilon: 0.08090578000851198
                                                                                          steps: 575
                                                                                                         lr: 2.560000000000000
episode: 1953
                score: 16.0
                               memory length: 564792
                                                        epsilon: 0.0797098600085128
                                                                                         steps: 604
                                                                                                        lr: 2.5600000000000001
                                                        epsilon: 0.07891192000851334
                                                                                          steps: 403
episode: 1954
                score: 12.0
                               memory length: 565195
                                                                                                        lr: 2.560000000000000
episode: 1955
                score: 17.0
                               memory length: 565839
                                                        epsilon: 0.07763680000851421
                                                                                          steps: 644
                                                                                                         1r: 2.560000000000000
episode: 1956
                score: 12.0
                                      length: 566373
                                                        epsilon: 0.07657948000851493
                                                                                          steps: 534
                                                                                                         lr: 2.56000000000000
episode: 1957
                score: 16.0
                               memory length: 566958
                                                        epsilon: 0.07542118000851572
                                                                                          steps: 585
                                                                                                         lr: 2.56000000000000
episode: 1958
                               memory length: 567337
                                                        ensilon: 0.07467076000851623
                                                                                          steps: 379
                                                                                                         1r: 2.560000000000000
                score: 10.0
episode: 1959
                score: 12.0
                               memory length: 567909
                                                        epsilon: 0.073538200008517
                                                                                        steps: 572
                                                                                                      lr: 2.5600000000000001e
episode: 1960
                score: 14.0
                               memory length: 568449
                                                        epsilon: 0.07246900000851773
                                                                                          steps: 540
                                                                                                         lr: 2.560000000000000
                               memory length: 569011
episode: 1961
                                                        epsilon: 0.07135624000851849
                                                                                          steps: 562
                score: 15.0
                                                                                                         lr: 2.560000000000000
episode: 1962
                                                        epsilon: 0.07020190000851928
                score: 12.0
                               memory length: 569594
                                                                                          steps: 583
                                                                                                         1r: 2.560000000000000
episode: 1963
                               memory length: 570218
                score: 15.0
                                                        epsilon: 0.06896638000852012
                                                                                          steps: 624
                                                                                                         lr: 2.560000000000000
                                                                                                         lr: 2.56000000000000
episode: 1964
                               memory length: 570827
                                                        epsilon: 0.06776056000852095
                score: 13.0
                                                                                          steps: 609
                                                                                          steps: 797
episode: 1965
                score: 22.0
                               memory length: 571624
                                                        epsilon: 0.06618250000852202
                                                                                                         lr: 2.560000000000000
episode: 1966
                score: 12.0
                               memory length: 572198
                                                        epsilon: 0.0650459800085228
                                                                                         steps: 574
                                                                                                        lr: 2.560000000000001
episode: 1967
                score: 12.0
                               memory length: 572769
                                                        epsilon: 0.06391540000852357
                                                                                          steps: 571
                                                                                                         lr: 2.560000000000000
                               memory length: 573369
episode: 1968
                score: 16.0
                                                        epsilon: 0.06272740000852438
                                                                                          steps: 600
                                                                                                         lr: 2.560000000000000
episode: 1969
                score: 20.0
                               memory length: 573825
                                                        epsilon: 0.061824520008524994
                                                                                           steps: 456
                                                                                                         lr: 2.5600000000000
episode: 1970
                 score: 14.0
                               memory
                                      length: 574466
                                                        epsilon: 0.06055534000852586
                                                                                          steps: 641
                                                                                                         lr: 2.560000000000000
episode: 1971
                               memory length: 575027
                score: 11.0
                                                        epsilon: 0.05944456000852662
                                                                                          steps: 561
                                                                                                         lr: 2.560000000000000
episode: 1972
                score: 13.0
                               memory length: 575508
                                                        ensilon: 0.05849218000852727
                                                                                          steps: 481
                                                                                                         1r: 2.560000000000000
                score: 9.0
episode: 1973
                              memory length: 575979
                                                       epsilon: 0.0575596000085279
                                                                                        steps: 471
                                                                                                      lr: 2.560000000000001e
episode: 1974
                score: 10.0
                               memory length: 576501
                                                        epsilon: 0.05652604000852861
                                                                                          steps: 522
                                                                                                         lr: 2.56000000000000
episode: 1975
                score: 12.0
                               memory length: 577042
                                                        epsilon: 0.05545486000852934
                                                                                          steps: 541
                                                                                                         lr: 2.560000000000000
episode: 1976
                score: 7.0
                              memory length: 577427
                                                       epsilon: 0.05469256000852986
                                                                                         steps: 385
                                                                                                        lr: 2.5600000000000001
episode: 1977
                score: 11.0
                               memory length: 577836
                                                        epsilon: 0.05388274000853041
                                                                                          steps: 409
                                                                                                         lr: 2.560000000000000
episode: 1978
                score: 13.0
                               memory length: 578478
                                                        epsilon: 0.05261158000853128
                                                                                          steps: 642
                                                                                                         lr: 2.560000000000000
episode: 1979
                score: 17.0
                               memory length: 579128
                                                        epsilon: 0.051324580008532156
                                                                                           steps: 650
                                                                                                         1r: 2.56000000000000
                score: 15.0
                               memory length: 579813
episode: 1980
                                                        epsilon: 0.04996828000853308
                                                                                          steps: 685
                                                                                                         lr: 2.560000000000000
episode: 1981
                score: 11.0
                               memory length: 580321
                                                        epsilon: 0.04896244000853377
                                                                                          steps: 508
                                                                                                         lr: 2.560000000000000
                               memory length: 580695
                                                                                          steps: 374
episode: 1982
                score: 10.0
                                                        epsilon: 0.04822192000853427
                                                                                                         lr: 2.560000000000000
episode: 1983
                score: 9.0
                              memory length: 581167
                                                       epsilon: 0.04728736000853491
                                                                                         steps: 472
                                                                                                        lr: 2.560000000000001
episode: 1984
                score: 8.0
                              memory length: 581579
                                                       epsilon: 0.046471600008535466
                                                                                          steps: 412
                                                                                                         lr: 2.560000000000000
                                                                                          steps: 498
episode: 1985
                score: 14.0
                               memory length: 582077
                                                        epsilon: 0.04548556000853614
                                                                                                         lr: 2.560000000000000
episode: 1986
                                                        epsilon: 0.04440844000853687
                score: 13.0
                               memory length: 582621
                                                                                          steps: 544
                                                                                                         1r: 2.560000000000000
episode: 1987
                score: 17.0
                               memory length: 583225
                                                        epsilon: 0.04321252000853769
                                                                                                         lr: 2.56000000000000
                                                                                          steps: 604
episode: 1988
                score: 13.0
                               memory length: 583853
                                                        epsilon: 0.04196908000853854
                                                                                          steps: 628
                                                                                                         lr: 2.560000000000000
episode: 1989
                                                        epsilon: 0.04098700000853921
                score: 14.0
                               memory length: 584349
                                                                                          steps: 496
                                                                                                         lr: 2.560000000000000
episode: 1990
                score: 13.0
                               memory length: 584953
                                                        epsilon: 0.03979108000854002
                                                                                          steps: 604
                                                                                                         lr: 2.560000000000000
episode: 1991
                score: 21.0
                               memory length: 585576
                                                        epsilon: 0.038557540008540864
                                                                                           steps: 623
                                                                                                         lr: 2.56000000000000
episode: 1992
                score: 18.0
                               memory length: 586362
                                                        epsilon: 0.037001260008541925
                                                                                           steps: 786
                                                                                                         lr: 2.56000000000000
episode: 1993
                score: 11.0
                               memory length: 586865
                                                        epsilon: 0.036005320008542605
                                                                                           steps: 503
                                                                                                         lr: 2.56000000000000
                               memory length: 587338
episode: 1994
                score: 14.0
                                                        epsilon: 0.03506878000854324
                                                                                          steps: 473
                                                                                                         lr: 2.560000000000000
episode: 1995
                score: 13.0
                               memory length: 587977
                                                        epsilon: 0.033803560008544106
                                                                                                         lr: 2.56000000000000
                                                                                           steps: 639
episode: 1996
                score: 15.0
                               memory length: 588513
                                                        epsilon: 0.03274228000854483
                                                                                          steps: 536
                                                                                                         1r. 2.560000000000000
                 score: 17.0
episode: 1997
                               memory length: 588971
                                                        epsilon: 0.03183544000854545
                                                                                          steps: 458
                                                                                                         lr: 2.560000000000000
episode: 1998
                score: 15.0
                               memory length: 589660
                                                        epsilon: 0.03047122000854638
                                                                                          steps: 689
                                                                                                         lr: 2.560000000000000
                               memory length: 590151
episode: 1999
                score: 10.0
                                                        epsilon: 0.029499040008547042
                                                                                                         lr: 2.56000000000000
                                                                                           steps: 491
episode: 2000
                score: 17.0
                               memory length: 590795
                                                        epsilon: 0.028223920008547912
                                                                                           steps: 644
                                                                                                         lr: 2.56000000000000
episode: 2001
                 score: 9.0
                                                        epsilon: 0.027249760008548576
                                                                                                         lr: 2.56000000000000
                              memory length: 591287
                                                                                          steps: 492
episode: 2002
                                                                                         steps: 536
                score: 11.0
                               memory length: 591823
                                                        epsilon: 0.0261884800085493
                                                                                                        lr: 2.5600000000000001
                                                       epsilon: 0.02522224000854996
episode: 2003
                score: 9.0
                              memory length: 592311
                                                                                         steps: 488
                                                                                                        lr: 2.5600000000000001
episode: 2004
                score: 12.0
                               memory length: 592858
                                                        epsilon: 0.024139180008550698
                                                                                                         lr: 2.5600000000000
                                                                                           steps: 547
episode: 2005
                score: 13.0
                               memory length: 593465
                                                        epsilon: 0.022937320008551518
                                                                                           steps: 607
                                                                                                         lr: 2.56000000000000
                                                                                          steps: 536
episode: 2006
                score: 10.0
                               memory length: 594001
                                                        epsilon: 0.02187604000855224
                                                                                                         lr: 2.560000000000000
episode: 2007
                score: 13.0
                               memory length: 594457
                                                        epsilon: 0.020973160008552857
                                                                                           steps: 456
                                                                                                         lr: 2.56000000000000
episode: 2008
                score: 13.0
                               memory length: 595095
                                                        epsilon: 0.01970992000855372
                                                                                          steps: 638
                                                                                                         lr: 2.560000000000000
episode: 2009
                score: 14.0
                               memory length: 595649
                                                        epsilon: 0.018613000008554467
                                                                                           steps: 554
                                                                                                         lr: 2.56000000000000
episode: 2010
                score: 21.0
                               memory length: 596314
                                                        epsilon: 0.017296300008555365
                                                                                           steps: 665
                                                                                                         1r: 2.56000000000000
episode: 2011
                score: 13.0
                               memory length: 596949
                                                        epsilon: 0.016039000008556223
                                                                                           steps: 635
                                                                                                         lr: 2.5600000000000
episode: 2012
                score: 5.0
                              memory length: 597260
                                                       epsilon: 0.015423220008556466
                                                                                          steps: 311
                                                                                                         lr: 2.560000000000000
episode: 2013
                score: 13.0
                               memory length: 597853
                                                        epsilon: 0.014249080008556238
                                                                                           steps: 593
                                                                                                         lr: 2.56000000000000
episode: 2014
                score: 16.0
                               memory length: 598448
                                                        epsilon: 0.01307098000855601
                                                                                          steps: 595
                                                                                                         lr: 2.560000000000000
episode: 2015
                score: 10.0
                               memory length: 598975
                                                        epsilon: 0.012027520008555807
                                                                                           steps: 527
                                                                                                         lr: 2.56000000000000
episode: 2016
                score: 19.0
                               memory length: 599619
                                                        epsilon: 0.01075240000855556
                                                                                          steps: 644
                                                                                                         lr: 2.560000000000000
episode: 2017
                score: 13.0
                               memory length: 600095
                                                        epsilon: 0.009998020008555413
                                                                                           steps: 476
                                                                                                         lr: 1.0240000000000
                                                                                                         lr: 1.0240000000000
episode: 2018
                score: 15.0
                               memory length: 600624
                                                        epsilon: 0.009998020008555413
                                                                                           steps: 529
episode: 2019
                score: 16.0
                                                        epsilon: 0.009998020008555413
                                                                                           steps: 767
                                                                                                         lr: 1.0240000000000
                               memory length: 601391
episode: 2020
                                                                                           steps: 778
                score: 19.0
                               memory length: 602169
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 1.0240000000000
                                                        epsilon: 0.009998020008555413
episode: 2021
                 score: 12.0
                               memory length: 602739
                                                                                                         lr: 1.0240000000000
                                                                                           steps: 570
episode: 2022
                score: 23.0
                               memory length: 603490
                                                        epsilon: 0.009998020008555413
                                                                                           steps: 751
                                                                                                         lr: 1.0240000000000
```

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episode: 2023
                                                                                          steps: 519
                              memory length: 604009
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 1.0240000000000
                score: 11.0
episode: 2024
                score: 22.0
                               memory length: 604769
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 760
                                                                                                         1r: 1.0240000000000
                                                        epsilon: 0.009998020008555413
episode: 2025
                                                                                                         lr: 1.0240000000000
                score: 12.0
                               memory length: 605339
                                                                                          steps: 570
                               memory length: 605963
episode: 2026
                score: 17.0
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 1.0240000000000
                                                                                          steps: 624
episode: 2027
                score: 15.0
                               memory length: 606660
                                                        ensilon: 0.009998020008555413
                                                                                          steps: 697
                                                                                                         lr: 1.0240000000000
episode: 2028
                score: 9.0
                              memory length: 607153
                                                       epsilon: 0.009998020008555413
                                                                                         steps: 493
                                                                                                        lr: 1.02400000000000
episode: 2029
                score: 16.0
                               memory length: 607862
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 709
                                                                                                         lr: 1.0240000000000
episode: 2030
                score: 11.0
                               memory length: 608351
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 489
                                                                                                         lr: 1.0240000000000
episode: 2031
                                                        epsilon: 0.009998020008555413
                score: 14.0
                               memory length: 608994
                                                                                          steps: 643
                                                                                                         lr: 1.0240000000000
episode: 2032
                score: 20.0
                               memory length: 609734
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 740
                                                                                                         lr: 1.0240000000000
episode: 2033
                score: 7.0
                                                       epsilon: 0.009998020008555413
                                                                                                        lr: 1.02400000000000
                              memory length: 610156
                                                                                         steps: 422
episode: 2034
                score: 12.0
                               memory length: 610708
                                                        ensilon: 0.009998020008555413
                                                                                          steps: 552
                                                                                                         lr: 1.0240000000000
                                                                                                         lr: 1.0240000000000
episode: 2035
                score: 12.0
                               memory length: 611182
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 474
episode: 2036
                score: 13.0
                               memory length: 611734
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 552
                                                                                                         lr: 1.0240000000000
episode: 2037
                score: 7.0
                              memory length: 612121
                                                       epsilon: 0.009998020008555413
                                                                                         steps: 387
                                                                                                        lr: 1.02400000000000
episode: 2038
                score: 14.0
                               memory length: 612731
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 610
                                                                                                         lr: 1.0240000000000
episode: 2039
                score: 15.0
                               memory length: 613370
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 639
                                                                                                         lr: 1.0240000000000
                score: 10.0
                                                                                          steps: 493
episode: 2040
                               memory length: 613863
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 1.0240000000000
episode: 2041
                score: 14.0
                               memory length: 614490
                                                        ensilon: 0.009998020008555413
                                                                                          steps: 627
                                                                                                         lr: 1.0240000000000
episode: 2042
                score: 19.0
                               memory length: 615070
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 1.0240000000000
                                                                                          steps: 580
                                                                                          steps: 706
episode: 2043
                score: 14.0
                               memory length: 615776
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 1.0240000000000
episode: 2044
                              memory length: 616249
                                                       epsilon: 0.009998020008555413
                                                                                         steps: 473
                score: 9.0
                                                                                                        lr: 1.02400000000000
episode: 2045
                score: 12.0
                               memory length: 616821
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 572
                                                                                                         lr: 1.0240000000000
episode: 2046
                score: 11.0
                               memory length: 617361
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 540
                                                                                                         lr: 1.0240000000000
episode: 2047
                               memory length: 617890
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 529
                score: 11.0
                                                                                                         lr: 1.0240000000000
episode: 2048
                                                        epsilon: 0.009998020008555413
                score: 11.0
                               memory length: 618423
                                                                                          steps: 533
                                                                                                         lr: 1.0240000000000
episode: 2049
                score: 15.0
                               memory length: 619118
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 695
                                                                                                         lr: 1.0240000000000
episode: 2050
                score: 13.0
                               memory length: 619646
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 1.0240000000000
                                                                                          steps: 528
                                                                                          steps: 759
episode: 2051
                score: 28.0
                                                        epsilon: 0.009998020008555413
                               memory length: 620405
                                                                                                         lr: 1.0240000000000
episode: 2052
                score: 18.0
                               memory length: 620914
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 509
                                                                                                         lr: 1.0240000000000
episode: 2053
                score: 12.0
                               memory length: 621496
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 582
                                                                                                         lr: 1.0240000000000
episode: 2054
                                                        epsilon: 0.009998020008555413
                score: 14.0
                               memory length: 622147
                                                                                          steps: 651
                                                                                                         lr: 1.0240000000000
episode: 2055
                score: 9.0
                              memory length: 622627
                                                       epsilon: 0.009998020008555413
                                                                                         steps: 480
                                                                                                        lr: 1.024000000000000
episode: 2056
                score: 14.0
                               memory length: 623183
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 556
                                                                                                         lr: 1.0240000000000
episode: 2057
                                                        epsilon: 0.009998020008555413
                score: 14.0
                               memory length: 623811
                                                                                          steps: 628
                                                                                                         lr: 1.0240000000000
episode: 2058
                score: 21.0
                               memory length: 624525
                                                        ensilon: 0.009998020008555413
                                                                                          steps: 714
                                                                                                         lr: 1.0240000000000
episode: 2059
                score: 23.0
                               memory length: 625259
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 734
                                                                                                         lr: 1.0240000000000
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 1.0240000000000
episode: 2060
                score: 18.0
                               memory length: 625852
                                                                                          steps: 593
episode: 2061
                score: 15.0
                               memory length: 626421
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 569
                                                                                                         lr: 1.0240000000000
episode: 2062
                score: 14.0
                               memory length: 627091
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 670
                                                                                                         lr: 1.0240000000000
episode: 2063
                                                        epsilon: 0.009998020008555413
                score: 15.0
                               memory length: 627752
                                                                                          steps: 661
                                                                                                         lr: 1.0240000000000
episode: 2064
                score: 12.0
                               memory length: 628322
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 570
                                                                                                         lr: 1.0240000000000
episode: 2065
                score: 19.0
                               memory length: 628858
                                                        ensilon: 0.009998020008555413
                                                                                          steps: 536
                                                                                                         lr: 1.0240000000000
                                                                                                        lr: 1.02400000000000
episode: 2066
                score: 9.0
                              memory length: 629331
                                                       epsilon: 0.009998020008555413
                                                                                         steps: 473
episode: 2067
                score: 13.0
                               memory length: 629941
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 610
                                                                                                         lr: 1.0240000000000
episode: 2068
                score: 16.0
                               memory length: 630512
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 571
                                                                                                         lr: 1.0240000000000
episode: 2069
                score: 16.0
                               memory length: 631116
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 604
                                                                                                         lr: 1.0240000000000
episode: 2070
                score: 10.0
                               memory length: 631637
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 521
                                                                                                         lr: 1.0240000000000
episode: 2071
                score: 12.0
                               memory length: 632228
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 591
                                                                                                         lr: 1.0240000000000
episode: 2072
                score: 13.0
                               memory length: 632915
                                                        ensilon: 0.009998020008555413
                                                                                          steps: 687
                                                                                                         lr: 1.0240000000000
episode: 2073
                                                                                                         lr: 1.0240000000000
                score: 17.0
                               memory length: 633420
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 505
episode: 2074
                score: 10.0
                               memory length: 633967
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 547
                                                                                                         lr: 1.0240000000000
episode: 2075
                                                                                          steps: 479
                score: 10.0
                               memory length: 634446
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 1.0240000000000
episode: 2076
                score: 14.0
                               memory length: 635115
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 669
                                                                                                         lr: 1.0240000000000
episode: 2077
                score: 18.0
                               memory length: 635667
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 552
                                                                                                         lr: 1.0240000000000
episode: 2078
                score: 7.0
                              memory length: 636027
                                                       epsilon: 0.009998020008555413
                                                                                         steps: 360
                                                                                                        lr: 1.02400000000000
                                                        epsilon: 0.009998020008555413
episode: 2079
                score: 20.0
                               memory length: 636635
                                                                                          steps: 608
                                                                                                         lr: 1.0240000000000
episode: 2080
                score: 11.0
                               memory length: 637208
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 573
                                                                                                         lr: 1.0240000000000
episode: 2081
                score: 9.0
                              memory length: 637636
                                                       epsilon: 0.009998020008555413
                                                                                         steps: 428
                                                                                                        lr: 1.02400000000000
episode: 2082
                score: 19.0
                               memory length: 638319
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 683
                                                                                                         1r: 1.0240000000000
                score: 20.0
                                                        epsilon: 0.009998020008555413
episode: 2083
                               memory length: 638903
                                                                                          steps: 584
                                                                                                         lr: 1.0240000000000
episode: 2084
                score: 18.0
                               memory length: 639603
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 700
                                                                                                         lr: 1.0240000000000
                               memory length: 640267
episode: 2085
                score: 20.0
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 1.0240000000000
                                                                                          steps: 664
episode: 2086
                score: 23.0
                               memory length: 640990
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 723
                                                                                                         1r: 1.0240000000000
                                                        epsilon: 0.009998020008555413
episode: 2087
                score: 11.0
                               memory length: 641512
                                                                                          steps: 522
                                                                                                         lr: 1.0240000000000
episode: 2088
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 553
                score: 10.0
                               memory length: 642065
                                                                                                         lr: 1.0240000000000
                                                                                          steps: 586
episode: 2089
                score: 11.0
                               memory length: 642651
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 1.0240000000000
episode: 2090
                score: 11.0
                               memory length: 643170
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 519
                                                                                                         lr: 1.0240000000000
episode: 2091
                score: 11.0
                               memory length: 643737
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 567
                                                                                                         lr: 1.0240000000000
episode: 2092
                                                                                          steps: 716
                score: 24.0
                               memory length: 644453
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 1.0240000000000
episode: 2093
                                                        epsilon: 0.009998020008555413
                score: 23.0
                               memory length: 645065
                                                                                          steps: 612
                                                                                                         lr: 1.0240000000000
episode: 2094
                score: 16.0
                               memory length: 645710
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 645
                                                                                                         lr: 1.0240000000000
episode: 2095
                score: 14.0
                               memory length: 646259
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 549
                                                                                                         lr: 1.0240000000000
episode: 2096
                score: 13.0
                               memory length: 646883
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 624
                                                                                                         1r: 1.0240000000000
                score: 17.0
                                                        epsilon: 0.009998020008555413
episode: 2097
                               memory length: 647550
                                                                                          steps: 667
                                                                                                         lr: 1.0240000000000
episode: 2098
                score: 9.0
                              memory length: 648052
                                                       epsilon: 0.009998020008555413
                                                                                         steps: 502
                                                                                                        lr: 1.02400000000000
                               memory length: 648741
episode: 2099
                score: 18.0
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 689
                                                                                                         lr: 1.0240000000000
episode: 2100
                score: 9.0
                              memory length: 649170
                                                       epsilon: 0.009998020008555413
                                                                                         steps: 429
                                                                                                        lr: 1.02400000000000
                                                        epsilon: 0.009998020008555413
episode: 2101
                score: 12.0
                               memory length: 649734
                                                                                          steps: 564
                                                                                                         lr: 1.0240000000000
episode: 2102
                score: 19.0
                               memory length: 650503
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 769
                                                                                                         lr: 1.0240000000000
episode: 2103
                score: 15.0
                               memory length: 651191
                                                        ensilon: 0.009998020008555413
                                                                                          steps: 688
                                                                                                         lr: 1.0240000000000
                                                                                          steps: 799
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 1.0240000000000
episode: 2104
                score: 24.0
                               memory length: 651990
episode: 2105
                score: 9.0
                                                       epsilon: 0.009998020008555413
                                                                                         steps: 428
                                                                                                        lr: 1.02400000000000
                              memory length: 652418
episode: 2106
                score: 13.0
                               memory length: 652975
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 557
                                                                                                         lr: 1.0240000000000
onicodo. 2107
                ggoro. 16 0
                               mamarr langth, 652620
                                                        omailom. A AAAAAAAAAAAA
                                                                                          a+ona. 652
                                                                                                         1 ... 1 02400000000000
```

```
episode: Ziu/
                score: 10.0
                               memory rength: 00002
                                                        epsiion: U.UUJJJBUZUUUBDDD3413
                                                                                          steps: 003
                                                                                                         TT: 1.0240000000000
episode: 2108
                score: 22.0
                               memory length: 654292
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 664
                                                                                                         lr: 1.0240000000000
episode: 2109
                score: 13.0
                               memory length: 654948
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 1.0240000000000
                                                                                          steps: 656
                score: 10.0
episode: 2110
                               memory length: 655431
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 483
                                                                                                         1r: 1.0240000000000
episode: 2111
                                      length: 656091
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 1.0240000000000
                score: 15.0
                               memory
                                                                                          steps: 660
episode: 2112
                score: 21.0
                               memory length: 656747
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 656
                                                                                                         lr: 1.0240000000000
episode: 2113
                score: 18.0
                               memory length: 657431
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 684
                                                                                                         lr: 1.0240000000000
episode: 2114
                score: 16.0
                               memory length: 658077
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 646
                                                                                                         1r: 1.0240000000000
episode: 2115
                score: 14.0
                               memory length: 658699
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 622
                                                                                                         lr: 1.0240000000000
                               memory length: 659281
                                                                                          steps: 582
episode: 2116
                score: 12.0
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 1.0240000000000
episode: 2117
                score: 15.0
                               memory length: 659969
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 688
                                                                                                         lr: 1.0240000000000
                score: 17.0
                                                                                          steps: 549
episode: 2118
                               memory length: 660518
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 1.0240000000000
episode: 2119
                               memory length: 661117
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 599
                                                                                                         lr: 1.0240000000000
                score: 14.0
episode: 2120
                score: 15.0
                               memory length: 661812
                                                        ensilon: 0.009998020008555413
                                                                                          steps: 695
                                                                                                         lr: 1.0240000000000
                                                                                                         lr: 1.0240000000000
episode: 2121
                score: 13.0
                               memory length: 662450
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 638
episode: 2122
                score: 15.0
                               memory length: 662863
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 413
                                                                                                         lr: 1.0240000000000
episode: 2123
                score: 11.0
                               memory length: 663438
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 575
                                                                                                         lr: 1.0240000000000
episode: 2124
                score: 19.0
                               memory length: 664104
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 666
                                                                                                         1r: 1.0240000000000
                                                        epsilon: 0.009998020008555413
episode: 2125
                               memorv
                                                                                                         lr: 1.0240000000000
                score: 18.0
                                      length: 664744
                                                                                          steps: 640
episode: 2126
                score: 19.0
                               memory length: 665316
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 572
                                                                                                         lr: 1.0240000000000
episode: 2127
                               memory length: 665915
                score: 12.0
                                                        ensilon: 0.009998020008555413
                                                                                          steps: 599
                                                                                                         lr: 1.0240000000000
episode: 2128
                score: 10.0
                               memory length: 666415
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 500
                                                                                                         lr: 1.0240000000000
episode: 2129
                score: 13.0
                               memory length: 667016
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 601
                                                                                                         lr: 1.0240000000000
episode: 2130
                                                                                          steps: 646
                score: 15.0
                               memory length: 667662
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 1.0240000000000
                                                        epsilon: 0.009998020008555413
episode: 2131
                score: 14.0
                               memory length: 668242
                                                                                          steps: 580
                                                                                                         1r: 1.0240000000000
episode: 2132
                score: 22.0
                               memory length: 668873
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 631
                                                                                                         lr: 1.0240000000000
episode: 2133
                               memory length: 669345
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 472
                                                                                                         lr: 1.0240000000000
                score: 12.0
                                                       epsilon: 0.009998020008555413
episode: 2134
                score: 9.0
                              memory length: 669686
                                                                                         steps: 341
                                                                                                        lr: 1.02400000000000
episode: 2135
                score: 11.0
                               memory length: 670238
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 1.0240000000000
                                                                                          steps: 552
episode: 2136
                score: 21.0
                               memory length: 670929
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 691
                                                                                                         lr: 1.0240000000000
episode: 2137
                               memory length: 671519
                score: 17.0
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 590
                                                                                                         lr: 1.0240000000000
episode: 2138
                score: 10.0
                               memory length: 671995
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 476
                                                                                                         lr: 1.0240000000000
episode: 2139
                score: 15.0
                               memory length: 672437
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 442
                                                                                                         lr: 1.0240000000000
episode: 2140
                score: 20.0
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 1.0240000000000
                               memory length: 673128
                                                                                          steps: 691
episode: 2141
                score: 16.0
                               memory length: 673844
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 716
                                                                                                         1r: 1.0240000000000
episode: 2142
                score: 20.0
                                      length: 674582
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 738
                                                                                                         lr: 1.0240000000000
episode: 2143
                score: 16.0
                               memory length: 675260
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 678
                                                                                                         lr: 1.0240000000000
episode: 2144
                               memory length: 675903
                                                                                          steps: 643
                score: 15.0
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 1.0240000000000
episode: 2145
                score: 15.0
                               memory length: 676553
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 650
                                                                                                         lr: 1.0240000000000
episode: 2146
                score: 21.0
                               memory length: 677236
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 683
                                                                                                         lr: 1.0240000000000
episode: 2147
                               memory length: 677959
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 723
                                                                                                         lr: 1.0240000000000
                score: 19.0
                                                        epsilon: 0.009998020008555413
episode: 2148
                score: 23.0
                               memory length: 678799
                                                                                          steps: 840
                                                                                                         lr: 1.0240000000000
episode: 2149
                score: 8.0
                              memory length: 679201
                                                       epsilon: 0.009998020008555413
                                                                                                        lr: 1.02400000000000
                                                                                         steps: 402
episode: 2150
                               memory length: 679857
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 1.0240000000000
                score: 18.0
                                                                                          steps: 656
episode: 2151
                score: 21.0
                               memory length: 680563
                                                        ensilon: 0.009998020008555413
                                                                                          steps: 706
                                                                                                         lr: 1.0240000000000
episode: 2152
                score: 11.0
                               memory length: 681135
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 572
                                                                                                         lr: 1.0240000000000
episode: 2153
                score: 17.0
                               memory length: 681925
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 790
                                                                                                         lr: 1.0240000000000
episode: 2154
                score: 13.0
                               memory length: 682477
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 552
                                                                                                         lr: 1.0240000000000
episode: 2155
                score: 14.0
                               memory length: 683033
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 556
                                                                                                         1r: 1.0240000000000
episode: 2156
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 1.0240000000000
                score: 24.0
                               memory
                                      length: 683758
                                                                                          steps:
                                                                                                 725
episode: 2157
                score: 22.0
                               memory length: 684474
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 716
                                                                                                         lr: 1.0240000000000
episode: 2158
                score: 12.0
                               memory length: 684968
                                                        ensilon: 0.009998020008555413
                                                                                          steps: 494
                                                                                                         lr: 1.0240000000000
episode: 2159
                score: 14.0
                               memory length: 685584
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 1.0240000000000
                                                                                          steps: 616
episode: 2160
                score: 15.0
                               memory length: 686018
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 434
                                                                                                         lr: 1.0240000000000
episode: 2161
                               memory length: 686624
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 606
                                                                                                         lr: 1.0240000000000
                score: 13.0
                                                        epsilon: 0.009998020008555413
episode: 2162
                score: 19.0
                               memory length: 687367
                                                                                          steps: 743
                                                                                                         lr: 1.0240000000000
episode: 2163
                score: 15.0
                               memory length: 687994
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 627
                                                                                                         lr: 1.0240000000000
episode: 2164
                                                                                          steps: 703
                score: 15.0
                               memory length: 688697
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 1.0240000000000
episode: 2165
                score: 13.0
                               memory length: 689210
                                                        ensilon: 0.009998020008555413
                                                                                          steps: 513
                                                                                                         lr: 1.0240000000000
episode: 2166
                score: 21.0
                               memory length: 689935
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 1.0240000000000
                                                                                          steps: 725
                                                        epsilon: 0.009998020008555413
episode: 2167
                score: 19.0
                               memory length: 690672
                                                                                          steps: 737
                                                                                                         lr: 1.0240000000000
episode: 2168
                               memory length: 691222
                score: 11.0
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 550
                                                                                                         lr: 1.0240000000000
episode: 2169
                score: 13.0
                               memory length: 691851
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 629
                                                                                                         lr: 1.0240000000000
episode: 2170
                score: 12.0
                               memory length: 692417
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 566
                                                                                                         lr: 1.0240000000000
episode: 2171
                score: 18.0
                                                        epsilon: 0.009998020008555413
                               memory length: 692987
                                                                                          steps: 570
                                                                                                         lr: 1.0240000000000
episode: 2172
                score: 10.0
                               memory length: 693499
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 512
                                                                                                         1r: 1.0240000000000
episode: 2173
                               memory length: 694021
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 1.0240000000000
                score: 13.0
                                                                                          steps: 522
episode: 2174
                score: 26.0
                               memory length: 694950
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 929
                                                                                                         lr: 1.0240000000000
                               memory length: 695518
                                                                                          steps: 568
episode: 2175
                score: 11.0
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 1.0240000000000
episode: 2176
                score: 6.0
                              memory length: 695875
                                                       epsilon: 0.009998020008555413
                                                                                         steps: 357
                                                                                                        lr: 1.02400000000000
episode: 2177
                score: 17.0
                               memory length: 696477
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 602
                                                                                                         lr: 1.0240000000000
episode: 2178
                               memory length: 696990
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 1.0240000000000
                score: 11.0
                                                                                          steps: 513
                                                        epsilon: 0.009998020008555413
episode: 2179
                score: 14.0
                               memory length: 697596
                                                                                          steps: 606
                                                                                                         lr: 1.0240000000000
episode: 2180
                score: 14.0
                               memory length: 698245
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 649
                                                                                                         lr: 1.0240000000000
episode: 2181
                score: 23.0
                               memory length: 698927
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 1.0240000000000
                                                                                          steps: 682
episode: 2182
                score: 13.0
                               memory length: 699566
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 639
                                                                                                         lr: 1.0240000000000
episode: 2183
                score: 12.0
                               memory length: 700144
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 578
                                                                                                         lr: 4.0960000000000
episode: 2184
                score: 16.0
                               memory length: 700744
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 600
                                                                                                         lr: 4.09600000000000
                               memory length: 701306
episode: 2185
                score: 12.0
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 4.0960000000000
                                                                                          steps: 562
episode: 2186
                score: 16.0
                               memory length: 701805
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 499
                                                                                                         1r: 4.09600000000000
episode: 2187
                score: 15.0
                               memory length: 702364
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 559
                                                                                                         lr: 4.0960000000000
                               memory length: 703017
episode: 2188
                score: 18.0
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 4.09600000000000
                                                                                          steps: 653
                                                                                          steps: 701
episode: 2189
                score: 17.0
                               memory length: 703718
                                                        ensilon: 0.009998020008555413
                                                                                                         lr: 4.0960000000000
episode: 2190
                score: 18.0
                               memory length: 704244
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 526
                                                                                                         lr: 4.0960000000000
episode: 2191
                score: 25.0
                               memory length: 705092
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 848
                                                                                                         lr: 4.0960000000000
```

```
epsilon: 0.009998020008555413
                                                                                                         1r: 4.0960000000000
episode: 2192
                score: 18.0
                               memory length: 705788
                                                                                          steps: 696
episode: 2193
                score: 19.0
                               memory length: 706456
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 668
                                                                                                         lr: 4.09600000000000
episode: 2194
                score: 13.0
                               memorv
                                      length: 707010
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 554
                                                                                                         lr: 4.0960000000000
episode: 2195
                               memory length: 707724
                                                                                          steps: 714
                score: 15.0
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 4.0960000000000
episode: 2196
                score: 19.0
                               memory length: 708326
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 602
                                                                                                         1r: 4.09600000000000
                                                        epsilon: 0.009998020008555413
episode: 2197
                score: 13.0
                               memory
                                      length: 708927
                                                                                           steps: 601
                                                                                                         lr: 4.0960000000000
episode: 2198
                score: 30.0
                               memory length: 709745
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 818
                                                                                                         lr: 4.09600000000000
episode: 2199
                                                                                          steps: 727
                score: 16.0
                               memory length: 710472
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 4.0960000000000
episode: 2200
                score: 16.0
                               memory length: 711107
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 635
                                                                                                         lr: 4.0960000000000
episode: 2201
                score: 15.0
                               memory length: 711640
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 533
                                                                                                         lr: 4.0960000000000
episode: 2202
                               memory length: 712230
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 590
                                                                                                         lr: 4.0960000000000
                score: 16.0
                               memory length: 712763
episode: 2203
                score: 14.0
                                                        ensilon: 0.009998020008555413
                                                                                          steps: 533
                                                                                                         lr: 4.09600000000000
episode: 2204
                score: 24.0
                               memory length: 713489
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 726
                                                                                                         lr: 4.0960000000000
episode: 2205
                               memory length: 714152
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 4.09600000000000
                score: 14.0
                                                                                          steps: 663
                               memory length: 714766
episode: 2206
                score: 13.0
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 614
                                                                                                         lr: 4.0960000000000
episode: 2207
                score: 16.0
                               memory length: 715463
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 697
                                                                                                         lr: 4.0960000000000
episode: 2208
                score: 10.0
                               memorv
                                      length: 715946
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 483
                                                                                                         lr: 4.0960000000000
                               memory length: 716429
episode: 2209
                score: 10.0
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 4.0960000000000
                                                                                          steps: 483
episode: 2210
                score: 16.0
                               memory length: 717129
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 700
                                                                                                         1r: 4.09600000000000
episode: 2211
                score: 18.0
                               memory
                                      length: 717817
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 688
                                                                                                         lr: 4.0960000000000
episode: 2212
                score: 23.0
                               memory length: 718580
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 763
                                                                                                         lr: 4.09600000000000
episode: 2213
                score: 17.0
                               memory length: 719188
                                                        ensilon: 0.009998020008555413
                                                                                          steps: 608
                                                                                                         lr: 4.0960000000000
episode: 2214
                score: 10.0
                               memory length: 719671
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 483
                                                                                                         lr: 4.0960000000000
episode: 2215
                score: 16.0
                               memory length: 720354
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 683
                                                                                                         lr: 4.0960000000000
episode: 2216
                score: 13.0
                               memory length: 720944
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 590
                                                                                                         lr: 4.0960000000000
episode: 2217
                score: 15.0
                               memory length: 721616
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 672
                                                                                                         1r: 4.09600000000000
episode: 2218
                score: 20.0
                               memory length: 722276
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 4.0960000000000
                                                                                          steps: 660
episode: 2219
                score: 13.0
                               memory length: 722893
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 617
                                                                                                         lr: 4.0960000000000
episode: 2220
                score: 13.0
                               memory length: 723509
                                                        ensilon: 0.009998020008555413
                                                                                          steps: 616
                                                                                                         lr: 4.09600000000000
                score: 10.0
episode: 2221
                               memory length: 724051
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 542
                                                                                                         lr: 4.0960000000000
episode: 2222
                score: 17.0
                                      length: 724747
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 696
                                                                                                         lr: 4.09600000000000
                               memory
episode: 2223
                score: 21.0
                               memory length: 725430
                                                                                                         lr: 4.0960000000000
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 683
episode: 2224
                score: 16.0
                               memory length: 726124
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 694
                                                                                                         lr: 4.0960000000000
episode: 2225
                score: 17.0
                               memory length: 726818
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 694
                                                                                                         lr: 4.09600000000000
episode: 2226
                score: 18.0
                               memory length: 727473
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 655
                                                                                                         lr: 4.0960000000000
                              memory length: 727920
episode: 2227
                score: 9.0
                                                       epsilon: 0.009998020008555413
                                                                                         steps: 447
                                                                                                        1r: 4.096000000000000
                               memory length: 728538
episode: 2228
                score: 13.0
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 4.0960000000000
                                                                                          steps: 618
episode: 2229
                score: 13.0
                               memory length: 729153
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 615
                                                                                                         lr: 4.09600000000000
episode: 2230
                               memory length: 729713
                                                                                          steps: 560
                score: 15.0
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 4.0960000000000
episode: 2231
                score: 15.0
                               memory length: 730353
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 640
                                                                                                         lr: 4.0960000000000
episode: 2232
                score: 14.0
                               memory length: 730917
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 564
                                                                                                         lr: 4.0960000000000
episode: 2233
                score: 12.0
                               memory length: 731505
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 588
                                                                                                         lr: 4.0960000000000
episode: 2234
                score: 12.0
                               memory length: 732035
                                                        ensilon: 0.009998020008555413
                                                                                          steps: 530
                                                                                                         lr: 4.09600000000000
episode: 2235
                score: 11.0
                               memory length: 732533
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 498
                                                                                                         lr: 4.0960000000000
episode: 2236
                               memory length: 733208
                                                        epsilon: 0.009998020008555413
                score: 23.0
                                                                                          steps: 675
                                                                                                         lr: 4.0960000000000
episode: 2237
                score: 17.0
                               memory length: 733894
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 686
                                                                                                         lr: 4.0960000000000
episode: 2238
                score: 23.0
                               memory length: 734664
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 770
                                                                                                         lr: 4.0960000000000
episode: 2239
                score: 10.0
                               memorv
                                     length: 735147
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 483
                                                                                                         lr: 4.0960000000000
                               memory length: 735756
episode: 2240
                score: 16.0
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 609
                                                                                                         lr: 4.0960000000000
episode: 2241
                score: 16.0
                               memory length: 736485
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 729
                                                                                                         1r: 4.09600000000000
episode: 2242
                score: 15.0
                               memory
                                      length: 737142
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 657
                                                                                                         lr: 4.0960000000000
episode: 2243
                score: 17.0
                               memory length: 737783
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 641
                                                                                                         lr: 4.09600000000000
episode: 2244
                               memory length: 738516
                                                                                          steps: 733
                score: 21.0
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 4.0960000000000
episode: 2245
                score: 13.0
                                      length: 739111
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 595
                                                                                                         lr: 4.0960000000000
                               memory
episode: 2246
                score: 18.0
                               memory length: 739640
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 529
                                                                                                         lr: 4.09600000000000
episode: 2247
                                                                                          steps: 551
                score: 11.0
                               memory length: 740191
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 4.0960000000000
episode: 2248
                score: 15.0
                               memory length: 740868
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 677
                                                                                                         lr: 4.0960000000000
episode: 2249
                score: 13.0
                               memory length: 741466
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 598
                                                                                                         lr: 4.09600000000000
episode: 2250
                               memory length: 742043
                                                                                          steps: 577
                score: 13.0
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 4.0960000000000
episode: 2251
                score: 17.0
                               memory length: 742670
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 627
                                                                                                         lr: 4.0960000000000
episode: 2252
                score: 10.0
                               memory length: 743174
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 4.0960000000000
                                                                                          steps: 504
episode: 2253
                                      length: 743681
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 507
                                                                                                         lr: 4.0960000000000
                score: 11.0
                               memory
                               memory length: 744202
episode: 2254
                score: 11.0
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 521
                                                                                                         lr: 4.0960000000000
episode: 2255
                score: 11.0
                               memory length: 744732
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 530
                                                                                                         lr: 4.0960000000000
episode: 2256
                score: 15.0
                               memory
                                      length: 745278
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 546
                                                                                                         lr: 4.0960000000000
episode: 2257
                               memory length: 745835
                score: 14.0
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 557
                                                                                                         lr: 4.0960000000000
episode: 2258
                score: 17.0
                               memory length: 746416
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 581
                                                                                                         1r: 4.09600000000000
episode: 2259
                                      length: 746959
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 4.0960000000000
                score: 12.0
                                                                                          steps: 543
episode: 2260
                score: 13.0
                               memory length: 747618
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 659
                                                                                                         lr: 4.0960000000000
                               memory length: 748369
                                                                                          steps: 751
episode: 2261
                score: 22.0
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 4.0960000000000
episode: 2262
                score: 18.0
                               memory length: 749020
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 651
                                                                                                         lr: 4.0960000000000
episode: 2263
                score: 15.0
                               memory length: 749666
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 646
                                                                                                         1r: 4.09600000000000
episode: 2264
                               memory length: 750420
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 754
                                                                                                         lr: 4.0960000000000
                score: 19.0
                                                        epsilon: 0.009998020008555413
episode: 2265
                score: 24.0
                               memory length: 751273
                                                                                          steps: 853
                                                                                                         lr: 4.09600000000000
episode: 2266
                score: 11.0
                               memory length: 751741
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 4.0960000000000
                                                                                          steps: 468
episode: 2267
                score: 14.0
                               memory length: 752350
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 609
                                                                                                         lr: 4.09600000000000
                               memory length: 752799
episode: 2268
                score: 15.0
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 449
                                                                                                         lr: 4.0960000000000
episode: 2269
                score: 20.0
                               memory length: 753450
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 651
                                                                                                         lr: 4.0960000000000
episode: 2270
                score: 13.0
                               memory length: 754045
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 595
                                                                                                         lr: 4.0960000000000
                               memory length: 754674
episode: 2271
                score: 18.0
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 4.0960000000000
                                                                                          steps: 629
episode: 2272
                score: 14.0
                               memory length: 755357
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 683
                                                                                                         1r: 4.09600000000000
episode: 2273
                score: 16.0
                               memory length: 756036
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 679
                                                                                                         lr: 4.0960000000000
episode: 2274
                score: 16.0
                               memory length: 756715
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 679
                                                                                                         lr: 4.0960000000000
episode: 2275
                score: 13.0
                               memory length: 757348
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 633
                                                                                                         lr: 4.0960000000000
episode: 2276
                score: 9.0
                              memory length: 757824
                                                       epsilon: 0.009998020008555413
                                                                                         steps: 476
                                                                                                        lr: 4.09600000000000
```

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episode: 2277
                               memory length: 758384
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 4.0960000000000
                score: 11.0
                                                                                          steps: 560
episode: 2278
                score: 10.0
                               memory length: 758884
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 500
                                                                                                         lr: 4.0960000000000
episode: 2279
                score: 18.0
                               memory length: 759529
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 645
                                                                                                         lr: 4.09600000000000
episode: 2280
                score: 13.0
                               memory
                                      length: 760160
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 631
                                                                                                         lr: 4.0960000000000
episode: 2281
                score: 15.0
                               memory length: 760727
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 567
                                                                                                         lr: 4.0960000000000
episode: 2282
                               memory length: 761624
                                                                                          steps: 897
                score: 30.0
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 4.09600000000000
                score: 17.0
episode: 2283
                               memory length: 762245
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 621
                                                                                                         lr: 4.0960000000000
episode: 2284
                score: 16.0
                               memory length: 762899
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 654
                                                                                                         lr: 4.0960000000000
                               memory length: 763484
episode: 2285
                                                                                          steps: 585
                score: 11.0
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 4.0960000000000
episode: 2286
                score: 19.0
                               memory length: 764221
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 737
                                                                                                         lr: 4.0960000000000
episode: 2287
                score: 12.0
                               memory length: 764803
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 582
                                                                                                         lr: 4.0960000000000
episode: 2288
                score: 14.0
                               memory length: 765345
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 542
                                                                                                         lr: 4.0960000000000
                                                        epsilon: 0.009998020008555413
episode: 2289
                score: 15.0
                               memory length: 766026
                                                                                          steps: 681
                                                                                                         lr: 4.09600000000000
                                                                                                         lr: 4.0960000000000
episode: 2290
                score: 10.0
                               memory length: 766514
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 488
episode: 2291
                               memory length: 767220
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 706
                                                                                                         lr: 4.09600000000000
                score: 16.0
                               memory length: 767741
episode: 2292
                score: 14.0
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 521
                                                                                                         lr: 4.0960000000000
                                                        epsilon: 0.009998020008555413
episode: 2293
                score: 13.0
                               memory length: 768323
                                                                                          steps: 582
                                                                                                         lr: 4.0960000000000
episode: 2294
                score: 13.0
                               memorv
                                      length: 768816
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 493
                                                                                                         lr: 4.0960000000000
episode: 2295
                               memory length: 769393
                score: 19.0
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 577
                                                                                                         lr: 4.0960000000000
episode: 2296
                score: 11.0
                               memory length: 769950
                                                        ensilon: 0.009998020008555413
                                                                                          steps: 557
                                                                                                         lr: 4.09600000000000
                score: 13.0
                               memory length: 770566
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 4.0960000000000
episode: 2297
                                                                                          steps: 616
episode: 2298
                score: 21.0
                               memory length: 771217
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 651
                                                                                                         lr: 4.09600000000000
                                                                                         steps: 457
episode: 2299
                score: 9.0
                              memory length: 771674
                                                       epsilon: 0.009998020008555413
                                                                                                        lr: 4.096000000000000
episode: 2300
                score: 11.0
                               memory length: 772226
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 552
                                                                                                         lr: 4.0960000000000
episode: 2301
                score: 13.0
                               memory length: 772839
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 613
                                                                                                         lr: 4.0960000000000
episode: 2302
                score: 13.0
                               memory length: 773429
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 590
                                                                                                         lr: 4.0960000000000
episode: 2303
                score: 18.0
                               memory length: 774215
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 786
                                                                                                         1r: 4.09600000000000
episode: 2304
                score: 13.0
                               memory length: 774793
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 578
                                                                                                         lr: 4.0960000000000
                               memory length: 775427
episode: 2305
                score: 14.0
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 634
                                                                                                         lr: 4.0960000000000
episode: 2306
                score: 17.0
                               memory length: 776105
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 678
                                                                                                         lr: 4.0960000000000
                score: 17.0
episode: 2307
                               memory length: 776782
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 677
                                                                                                         lr: 4.0960000000000
episode: 2308
                score: 15.0
                               memory length: 777488
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 706
                                                                                                         lr: 4.09600000000000
                               memory length: 778215
episode: 2309
                score: 16.0
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 727
                                                                                                         lr: 4.0960000000000
episode: 2310
                score: 8.0
                              memory length: 778669
                                                       epsilon: 0.009998020008555413
                                                                                         steps: 454
                                                                                                        1r: 4.096000000000000
episode: 2311
                score: 11.0
                               memory length: 779218
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 549
                                                                                                         lr: 4.0960000000000
episode: 2312
                score: 22.0
                               memory length: 779945
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 727
                                                                                                         lr: 4.0960000000000
episode: 2313
                score: 13.0
                               memory length: 780527
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 582
                                                                                                         1r: 4.09600000000000
                score: 10.0
episode: 2314
                               memory length: 781072
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 4.0960000000000
                                                                                          steps: 545
episode: 2315
                score: 12.0
                               memory length: 781660
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 588
                                                                                                         lr: 4.09600000000000
episode: 2316
                               memory length: 782538
                                                                                          steps: 878
                score: 28.0
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 4.0960000000000
episode: 2317
                score: 12.0
                               memory length: 783112
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 574
                                                                                                         lr: 4.0960000000000
episode: 2318
                score: 19.0
                               memory length: 783804
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 692
                                                                                                         lr: 4.0960000000000
episode: 2319
                score: 8.0
                              memory length: 784213
                                                       epsilon: 0.009998020008555413
                                                                                         steps: 409
                                                                                                        lr: 4.096000000000000
episode: 2320
                score: 12.0
                               memory length: 784800
                                                        ensilon: 0.009998020008555413
                                                                                          steps: 587
                                                                                                         lr: 4.09600000000000
                                                                                          steps: 738
episode: 2321
                score: 18.0
                               memory length: 785538
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 4.0960000000000
                                                                                                        lr: 4.09600000000000
episode: 2322
                score: 6.0
                              memory length: 785877
                                                       epsilon: 0.009998020008555413
                                                                                         steps: 339
                               memory length: 786382
episode: 2323
                                                        epsilon: 0.009998020008555413
                score: 13.0
                                                                                          steps: 505
                                                                                                         lr: 4.0960000000000
episode: 2324
                score: 12.0
                               memory length: 786947
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 565
                                                                                                         lr: 4.0960000000000
episode: 2325
                score: 17.0
                               memory length: 787584
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 637
                                                                                                         lr: 4.0960000000000
                               memory length: 788267
episode: 2326
                score: 18.0
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 4.0960000000000
                                                                                          steps: 683
episode: 2327
                score: 17.0
                               memory length: 788973
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 706
                                                                                                         1r: 4.09600000000000
episode: 2328
                score: 14.0
                               memory
                                      length:
                                              789621
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 648
                                                                                                         lr: 4.0960000000000
episode: 2329
                score: 12.0
                               memory length: 790198
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 577
                                                                                                         lr: 4.09600000000000
episode: 2330
                               memory length: 790796
                                                                                          steps: 598
                score: 12.0
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 4.0960000000000
episode: 2331
                score: 14.0
                               memory length: 791345
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 549
                                                                                                         lr: 4.0960000000000
episode: 2332
                score: 10.0
                               memory length: 791874
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 529
                                                                                                         lr: 4.09600000000000
episode: 2333
                score: 20.0
                               memory length: 792494
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 620
                                                                                                         lr: 4.0960000000000
episode: 2334
                score: 11.0
                               memory length: 792917
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 423
                                                                                                         1r: 4.09600000000000
episode: 2335
                score: 16.0
                               memory length: 793487
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 570
                                                                                                         lr: 4.0960000000000
episode: 2336
                score: 19.0
                               memory length: 794189
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 702
                                                                                                         lr: 4.0960000000000
                               memory length: 794736
episode: 2337
                score: 11.0
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 547
                                                                                                         lr: 4.0960000000000
episode: 2338
                score: 11.0
                               memory length: 795261
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 525
                                                                                                         lr: 4.0960000000000
episode: 2339
                score: 13.0
                                      length: 795862
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 4.09600000000000
                               memory
                                                                                          steps: 601
                               memory length: 796481
episode: 2340
                score: 13.0
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 619
                                                                                                         lr: 4.0960000000000
episode: 2341
                score: 20.0
                               memory length: 797194
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 713
                                                                                                         lr: 4.0960000000000
episode: 2342
                score: 13.0
                               memory
                                      length: 797811
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 617
                                                                                                         lr: 4.0960000000000
episode: 2343
                               memory length: 798429
                score: 13.0
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 618
                                                                                                         lr: 4.0960000000000
episode: 2344
                score: 22.0
                               memory length: 799261
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 832
                                                                                                         1r: 4.09600000000000
episode: 2345
                                      length:
                                              799895
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 4.0960000000000
                score: 14.0
                               memory
                                                                                          steps: 634
episode: 2346
                score: 10.0
                               memory length: 800288
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 393
                                                                                                         lr: 1.6384000000000
episode: 2347
                               memory length: 800967
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 679
                                                                                                         lr: 1.6384000000000
                score: 16.0
episode: 2348
                score: 16.0
                               memory length: 801519
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 552
                                                                                                         lr: 1.6384000000000
episode: 2349
                score: 12.0
                               memory length: 802157
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 638
                                                                                                         lr: 1.6384000000000
episode: 2350
                score: 18.0
                               memory length: 802979
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 822
                                                                                                         lr: 1.6384000000000
episode: 2351
                score: 15.0
                               memory length: 803546
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 567
                                                                                                         lr: 1.6384000000000
episode: 2352
                score: 14.0
                               memory length: 804095
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 549
                                                                                                         lr: 1.6384000000000
episode: 2353
                score: 14.0
                               memory length: 804669
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 574
                                                                                                         lr: 1.6384000000000
                               memory length: 805235
episode: 2354
                                                                                                         lr: 1.6384000000000
                score: 14.0
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 566
                                                        epsilon: 0.009998020008555413
episode: 2355
                score: 12.0
                               memory length: 805819
                                                                                          steps: 584
                                                                                                         lr: 1.6384000000000
episode: 2356
                score: 17.0
                               memory length: 806439
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 620
                                                                                                         lr: 1.6384000000000
episode: 2357
                score: 18.0
                               memory length: 807121
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 1.6384000000000
                                                                                          steps: 682
episode: 2358
                score: 14.0
                               memory length: 807754
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 633
                                                                                                         lr: 1.6384000000000
                                                        epsilon: 0.009998020008555413
episode: 2359
                score: 23.0
                                                                                                         lr: 1.6384000000000
                               memory length: 808502
                                                                                          steps: 748
episode: 2360
                score: 7.0
                              memory length: 808892
                                                       epsilon: 0.009998020008555413
                                                                                         steps: 390
                                                                                                        lr: 1.63840000000000
                                                       epsilon: 0.009998020008555413
                                                                                                        lr: 1.63840000000000
episode: 2361
                score: 9.0
                              memory length: 809379
                                                                                         steps: 487
```

```
episode: 2362
                score: 25.0
                               memory length: 810063
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 684
                                                                                                         lr: 1.6384000000000
episode: 2363
                score: 19.0
                                      length: 810713
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 650
                                                                                                         lr: 1.6384000000000
                               memory
                                                        epsilon: 0.009998020008555413
episode: 2364
                score: 11.0
                               memory length: 811280
                                                                                          steps: 567
                                                                                                         lr: 1.6384000000000
episode: 2365
                                                        epsilon: 0.009998020008555413
                score: 18.0
                               memory length: 812078
                                                                                          steps: 798
                                                                                                         lr: 1.6384000000000
                                                                                                         lr: 1.6384000000000
episode: 2366
                score: 18.0
                               memory length: 812674
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 596
                                                                                                         lr: 1.6384000000000
episode: 2367
                score: 16.0
                               memory length: 813161
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 487
                                                                                          steps: 565
episode: 2368
                score: 15.0
                               memory length: 813726
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 1.6384000000000
episode: 2369
                score: 12.0
                               memory length: 814190
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 464
                                                                                                         lr: 1.6384000000000
episode: 2370
                score: 22.0
                               memory length: 814940
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 750
                                                                                                         lr: 1.6384000000000
episode: 2371
                score: 12.0
                               memory length: 815504
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 1.6384000000000
                                                                                          steps: 564
episode: 2372
                score: 10.0
                               memory length: 815998
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 494
                                                                                                         lr: 1.6384000000000
episode: 2373
                               memory length: 816601
                score: 12.0
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 603
                                                                                                         lr: 1.6384000000000
episode: 2374
                score: 15.0
                               memory length: 817161
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 560
                                                                                                         lr: 1.6384000000000
episode: 2375
                score: 19.0
                               memory length: 817804
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 643
                                                                                                         lr: 1.6384000000000
                score: 12.0
episode: 2376
                               memory length: 818380
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 576
                                                                                                         lr: 1.6384000000000
episode: 2377
                score: 16.0
                               memory length: 819014
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 634
                                                                                                         lr: 1.6384000000000
                               memory length: 819588
                                                                                          steps: 574
episode: 2378
                score: 18.0
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 1.6384000000000
episode: 2379
                score: 14.0
                               memory length: 820271
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 683
                                                                                                         lr: 1.6384000000000
episode: 2380
                score: 13.0
                               memory length: 820913
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 642
                                                                                                         lr: 1.6384000000000
episode: 2381
                score: 25.0
                               memory length: 821638
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 725
                                                                                                         lr: 1.6384000000000
episode: 2382
                score: 14.0
                               memory length: 822164
                                                        ensilon: 0.009998020008555413
                                                                                          steps: 526
                                                                                                         lr: 1.6384000000000
                score: 17.0
                                                        epsilon: 0.009998020008555413
episode: 2383
                               memory length: 822691
                                                                                          steps: 527
                                                                                                         lr: 1.6384000000000
episode: 2384
                score: 19.0
                               memory length: 823450
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 759
                                                                                                         lr: 1.6384000000000
                               memory length: 824104
episode: 2385
                                                        epsilon: 0.009998020008555413
                score: 16.0
                                                                                          steps: 654
                                                                                                         lr: 1.6384000000000
episode: 2386
                score: 16.0
                               memory length: 824819
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 715
                                                                                                         lr: 1.6384000000000
episode: 2387
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 1.6384000000000
                score: 19.0
                               memory length: 825507
                                                                                          steps: 688
episode: 2388
                               memory length: 826096
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 589
                score: 16.0
                                                                                                         lr: 1.6384000000000
episode: 2389
                score: 22.0
                               memory length: 826918
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 822
                                                                                                         lr: 1.6384000000000
episode: 2390
                score: 12.0
                               memory length: 827494
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 576
                                                                                                         lr: 1.6384000000000
episode: 2391
                score: 34.0
                               memory length: 828449
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 1.6384000000000
                                                                                          steps: 955
                               memory length: 829079
episode: 2392
                score: 13.0
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 630
                                                                                                         lr: 1.6384000000000
episode: 2393
                score: 11.0
                               memory length: 829649
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 570
                                                                                                         lr: 1.6384000000000
episode: 2394
                score: 14.0
                               memory length: 830164
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 515
                                                                                                         lr: 1.6384000000000
episode: 2395
                score: 21.0
                               memory length: 830688
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 524
                                                                                                         lr: 1.6384000000000
episode: 2396
                score: 17.0
                               memory length: 831311
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 623
                                                                                                         lr: 1.6384000000000
                               memory length: 831888
                                                        epsilon: 0.009998020008555413
episode: 2397
                score: 14.0
                                                                                          steps: 577
                                                                                                         lr: 1.6384000000000
episode: 2398
                score: 23.0
                               memory length: 832611
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 723
                                                                                                         lr: 1.6384000000000
episode: 2399
                score: 13.0
                               memory length: 833291
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 680
                                                                                                         lr: 1.6384000000000
episode: 2400
                score: 15.0
                               memory length: 834013
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 722
                                                                                                         lr: 1.6384000000000
episode: 2401
                score: 9.0
                              memory length: 834500
                                                       epsilon: 0.009998020008555413
                                                                                          steps: 487
                                                                                                        lr: 1.63840000000000
episode: 2402
                score: 12.0
                               memory length: 835061
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 1.6384000000000
                                                                                          steps: 561
                                                        epsilon: 0.009998020008555413
episode: 2403
                score: 17.0
                               memory length: 835669
                                                                                          steps: 608
                                                                                                         lr: 1.6384000000000
                               memory length: 836304
episode: 2404
                score: 16.0
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 635
                                                                                                         lr: 1.6384000000000
episode: 2405
                               memory length: 836914
                score: 13.0
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 610
                                                                                                         lr: 1.6384000000000
episode: 2406
                score: 10.0
                               memory length: 837431
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 517
                                                                                                         lr: 1.6384000000000
episode: 2407
                score: 14.0
                               memory length: 838049
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 618
                                                                                                         lr: 1.6384000000000
episode: 2408
                score: 19.0
                               memory length: 838652
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 603
                                                                                                         lr: 1.6384000000000
                               memory length: 839204
episode: 2409
                score: 16.0
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 552
                                                                                                         lr: 1.6384000000000
episode: 2410
                score: 10.0
                               memory length: 839668
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 464
                                                                                                         lr: 1.6384000000000
episode: 2411
                score: 12.0
                               memory length: 840305
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 637
                                                                                                         lr: 1.6384000000000
episode: 2412
                score: 18.0
                               memory length: 840944
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 639
                                                                                                         lr: 1.6384000000000
episode: 2413
                score: 17.0
                               memory length: 841479
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 535
                                                                                                         lr: 1.6384000000000
                                                                                                         lr: 1.6384000000000
episode: 2414
                score: 11.0
                               memory length: 841908
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 429
episode: 2415
                score: 22.0
                               memory length: 842811
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 903
                                                                                                         lr: 1.6384000000000
episode: 2416
                score: 18.0
                               memory length: 843389
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 578
                                                                                                         lr: 1.6384000000000
episode: 2417
                score: 13.0
                               memory length: 844025
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 636
                                                                                                         lr: 1.6384000000000
episode: 2418
                score: 23.0
                               memory length: 844722
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 697
                                                                                                         lr: 1.6384000000000
episode: 2419
                score: 8.0
                              memory length: 845139
                                                       epsilon: 0.009998020008555413
                                                                                         steps: 417
                                                                                                        lr: 1.63840000000000
episode: 2420
                score: 15.0
                               memory length: 845690
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 551
                                                                                                         lr: 1.6384000000000
                score: 23.0
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 744
                                                                                                         lr: 1.6384000000000
episode: 2421
                               memory length: 846434
episode: 2422
                score: 24.0
                               memory length: 846831
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 397
                                                                                                         lr: 1.6384000000000
                               memory length: 847554
episode: 2423
                score: 22.0
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 723
                                                                                                         lr: 1.6384000000000
episode: 2424
                score: 22.0
                               memory length: 848290
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 736
                                                                                                         lr: 1.6384000000000
episode: 2425
                score: 12.0
                               memory length: 848856
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 566
                                                                                                         lr: 1.6384000000000
episode: 2426
                score: 15.0
                               memory length: 849471
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 615
                                                                                                         lr: 1.6384000000000
episode: 2427
                score: 11.0
                               memory length: 849988
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 517
                                                                                                         lr: 1.6384000000000
episode: 2428
                               memory length: 850605
                score: 16.0
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 617
                                                                                                         lr: 1.6384000000000
episode: 2429
                score: 23.0
                               memory length: 851332
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 727
                                                                                                         lr: 1.6384000000000
episode: 2430
                score: 13.0
                               memory length: 851904
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 572
                                                                                                         lr: 1.6384000000000
episode: 2431
                score: 17.0
                               memory length: 852553
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 649
                                                                                                         lr: 1.6384000000000
episode: 2432
                score: 22.0
                               memory length: 853285
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 732
                                                                                                         lr: 1.6384000000000
                               memory length: 853893
episode: 2433
                score: 12.0
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 608
                                                                                                         lr: 1.6384000000000
episode: 2434
                score: 7.0
                              memory length: 854283
                                                       epsilon: 0.009998020008555413
                                                                                         steps: 390
                                                                                                        1r: 1.63840000000000
episode: 2435
                              memory length: 854673
                                                       epsilon: 0.009998020008555413
                score: 7.0
                                                                                         steps: 390
                                                                                                        lr: 1.63840000000000
episode: 2436
                score: 11.0
                               memory length: 855215
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 542
                                                                                                         lr: 1.6384000000000
episode: 2437
                score: 10.0
                               memory length: 855758
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 543
                                                                                                         lr: 1.6384000000000
                score: 12.0
episode: 2438
                               memory length: 856342
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 584
                                                                                                         lr: 1.6384000000000
episode: 2439
                score: 21.0
                               memory length: 857010
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 668
                                                                                                         lr: 1.6384000000000
episode: 2440
                score: 19.0
                               memory length: 857740
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 730
                                                                                                         lr: 1.6384000000000
episode: 2441
                score: 19.0
                               memory length: 858385
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 645
                                                                                                         lr: 1.6384000000000
episode: 2442
                score: 14.0
                               memory length: 859058
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 673
                                                                                                         lr: 1.6384000000000
episode: 2443
                score: 26.0
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 1.6384000000000
                               memory length: 859888
                                                                                          steps: 830
episode: 2444
                score: 18.0
                               memory length: 860514
                                                        epsilon: 0.009998020008555413
                                                                                          steps: 626
                                                                                                         lr: 1.6384000000000
episode: 2445
                score: 22.0
                               memory length: 861201
                                                        epsilon: 0.009998020008555413
                                                                                                         lr: 1.6384000000000
                                                                                          steps: 687
                                                       epsilon: 0.009998020008555413
episode: 2446
                score: 9.0
                              memory length: 861711
                                                                                         steps: 510
                                                                                                        lr: 1.63840000000000
```

