

Treasure Hunt Game Notebook

Read and Review Your Starter Code

The theme of this project is a popular treasure hunt game in which the player needs to find the treasure before the pirate does. While you will not be developing the entire game, you will write the part of the game that represents the intelligent agent, which is a pirate in this case. The pirate will try to find the optimal path to the treasure using deep Q-learning.

You have been provided with two Python classes and this notebook to help you with this assignment. The first class, `TreasureMaze.py`, represents the environment, which includes a maze object defined as a matrix. The second class, `GameExperience.py`, stores the episodes – that is, all the states that come in between the initial state and the terminal state. This is later used by the agent for learning by experience, called "exploration". This notebook shows how to play a game. Your task is to complete the deep Q-learning implementation for which a skeleton implementation has been provided. The code blocks you will need to complete has `#TODO` as a header.

First, read and review the next few code and instruction blocks to understand the code that you have been given.

```
In [1]: from __future__ import print_function
import os, sys, time, datetime, json, random
import numpy as np
from keras.models import Sequential
from keras.layers import Dense, Activation
from keras.optimizers import SGD, Adam, RMSprop
from keras.layers import PReLU
import matplotlib.pyplot as plt
from TreasureMaze import TreasureMaze
from GameExperience import GameExperience
%matplotlib inline
```

The following code block contains an 8x8 matrix that will be used as a maze object:

```
In [2]: maze = np.array([
    [ 1.,  0.,  1.,  1.,  1.,  1.,  1.,  1.],
    [ 1.,  0.,  1.,  1.,  1.,  0.,  1.,  1.],
    [ 1.,  1.,  1.,  1.,  0.,  1.,  0.,  1.],
    [ 1.,  1.,  1.,  0.,  1.,  1.,  1.,  1.],
    [ 1.,  1.,  0.,  1.,  1.,  1.,  1.,  1.],
    [ 1.,  1.,  1.,  0.,  1.,  0.,  0.,  0.],
    [ 1.,  1.,  1.,  0.,  1.,  1.,  1.,  1.],
    [ 1.,  1.,  1.,  1.,  0.,  1.,  1.,  1.]
])
```

This helper function allows a visual representation of the maze object:

```
In [3]: def show(qmaze):
plt.grid('on')
nrows, ncols = qmaze.maze.shape
ax = plt.gca()
ax.set_xticks(np.arange(0.5, nrows, 1))
ax.set_yticks(np.arange(0.5, ncols, 1))
ax.set_xticklabels([])
ax.set_yticklabels([])
canvas = np.copy(qmaze.maze)
for row,col in qmaze.visited:
    canvas[row,col] = 0.6
pirate_row, pirate_col, _ = qmaze.state
canvas[pirate_row, pirate_col] = 0.3 # pirate cell
canvas[nrows-1, ncols-1] = 0.9 # treasure cell
img = plt.imshow(canvas, interpolation='none', cmap='gray')
return img
```

The pirate agent can move in four directions: left, right, up, and down.

While the agent primarily learns by experience through exploitation, often, the agent can choose to explore the environment to find previously undiscovered paths. This is called "exploration" and is defined by epsilon. This value is typically a lower value such as 0.1, which means for every ten attempts, the agent will attempt to learn by experience nine times and will randomly explore a new path one time. You are encouraged to try various values for the exploration factor and see how the algorithm performs.

```
In [4]: LEFT = 0
UP = 1
RIGHT = 2
DOWN = 3

# Exploration factor
epsilon = 0.1

# Actions dictionary
actions_dict = {
    LEFT: 'left',
    UP: 'up',
    RIGHT: 'right',
    DOWN: 'down',
}

num_actions = len(actions_dict)
```

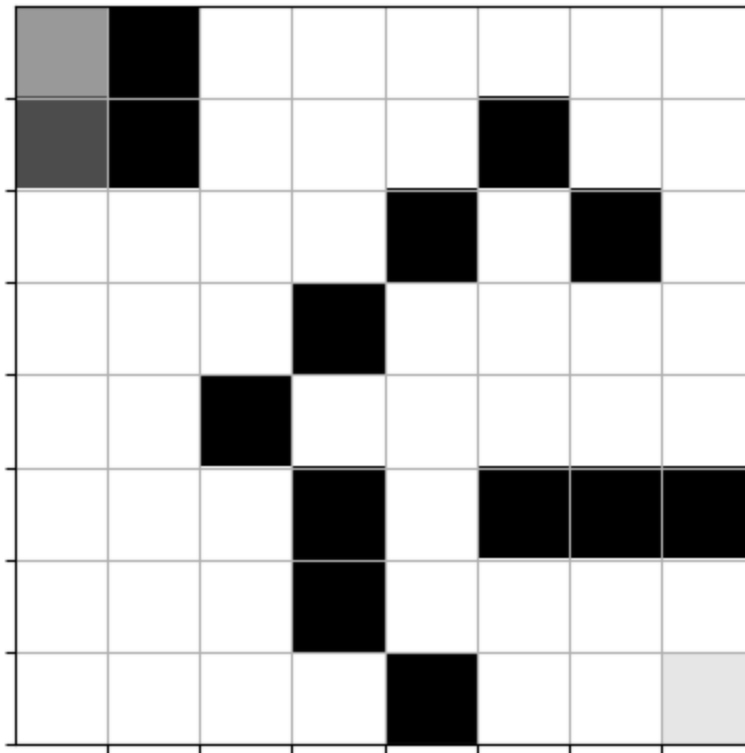
The sample code block and output below show creating a maze object and performing one action (DOWN), which returns the reward. The resulting updated environment is visualized.

```
In [5]: qmaze = TreasureMaze(maze)
canvas, reward, game_over = qmaze.act(DOWN)
```

```
print("reward=", reward)
show(qmaze)
```

reward= -0.04

Out[5]: <matplotlib.image.AxesImage at 0x2af655bf890>



This function simulates a full game based on the provided trained model. The other parameters include the TreasureMaze object and the starting position of the pirate.

```
In [6]: def play_game(model, qmaze, pirate_cell):
        qmaze.reset(pirate_cell)
        envstate = qmaze.observe()
        while True:
            prev_envstate = envstate
            # get next action
            q = model.predict(prev_envstate)
            action = np.argmax(q[0])

            # apply action, get rewards and new state
            envstate, reward, game_status = qmaze.act(action)
            if game_status == 'win':
                return True
            elif game_status == 'lose':
                return False
```

This function helps you to determine whether the pirate can win any game at all. If your maze is not well designed, the pirate may not win any game at all. In this case, your training would not yield any result. The provided maze in this notebook ensures that there is a path to win and you can run this method to check.

```
In [7]: def completion_check(model, qmaze):  
        for cell in qmaze.free_cells:  
            if not qmaze.valid_actions(cell):  
                return False  
            if not play_game(model, qmaze, cell):  
                return False  
        return True
```

The code you have been given in this block will build the neural network model. Review the code and note the number of layers, as well as the activation, optimizer, and loss functions that are used to train the model.

```
In [8]: def build_model(maze):  
        model = Sequential()  
        model.add(Dense(maze.size, input_shape=(maze.size,)))  
        model.add(PReLU())  
        model.add(Dense(maze.size))  
        model.add(PReLU())  
        model.add(Dense(num_actions))  
        model.compile(optimizer='adam', loss='mse')  
        return model
```

#TODO: Complete the Q-Training Algorithm Code Block

This is your deep Q-learning implementation. The goal of your deep Q-learning implementation is to find the best possible navigation sequence that results in reaching the treasure cell while maximizing the reward. In your implementation, you need to determine the optimal number of epochs to achieve a 100% win rate.

You will need to complete the section starting with `#pseudocode`. The pseudocode has been included for you.

```
In [9]: def qtrain(model, maze, **opt):  
  
        # exploration factor  
        global epsilon  
  
        # number of epochs  
        n_epoch = opt.get('n_epoch', 150)  
  
        # maximum memory to store episodes  
        max_memory = opt.get('max_memory', 1000)  
  
        # maximum data size for training  
        data_size = opt.get('data_size', 50)  
  
        # start time  
        start_time = datetime.datetime.now()
```

```

min_reward_before_death = -0.5

# Construct environment/game from numpy array: maze (see above)
qmaze = TreasureMaze(maze)

# Initialize experience replay object
experience = GameExperience(model, max_memory=max_memory)

win_history = [] # history of win/lose game
hsize = qmaze.maze.size//2 # history window size
win_rate = 0.0
loss = 0

# pseudocode:
# For each epoch:
for epoch in range(n_epoch):
    # Agent_cell = randomly select a free cell
    open_cells = find_open_cells(maze)
    agent_cell = random.choice(open_cells)
    # Reset the maze with agent set to above position
    qmaze.reset(agent_cell)
    # Hint: Review the reset method in the TreasureMaze.py class.
    # envstate = Environment.current_state
    envstate = qmaze.observe()
    # Hint: Review the observe method in the TreasureMaze.py class.
    # While state is not game over:
    while qmaze.game_status() == 'not_over' and qmaze.total_reward > min_reward:
        # previous_envstate = envstate
        prev_state = envstate
        # Action = randomly choose action (left, right, up, down) either by expl.
        action = random.choice(qmaze.valid_actions())
        envstate, reward, game_status = qmaze.act(action)
        # Hint: Review the act method in the TreasureMaze.py class.
        # episode = [previous_envstate, action, reward, envstate, game_status]
        episode = [prev_state, action, reward, envstate, game_status]
        # Store episode in Experience replay object
        experience.remember(episode)
        # Hint: Review the remember method in the GameExperience.py class.
        # Train neural network model and evaluate loss
        inputs, targets = experience.get_data()
        model.fit(inputs, targets)
        loss = model.evaluate(inputs, targets)
        # Hint: Call GameExperience.get_data to retrieve training data (input and targets)
        # to train the model. You can call model.evaluate to determine loss.
        # If the win rate is above the threshold and your model passes the completion threshold:
        win_history.append(1 if qmaze.game_status()=="win" else 0)
        win_rate = sum(win_history)/len(win_history)
        n_episodes = len(experience.memory)

#Print the epoch, loss, episodes, win count, and win rate for each epoch
dt = datetime.datetime.now() - start_time
t = format_time(dt.total_seconds())
template = "Epoch: {:03d}/{:d} | Loss: {:.4f} | Episodes: {:d} | Win count: {:d}"
print(template.format(epoch, n_epoch-1, loss, n_episodes, sum(win_history)))
# We simply check if training has exhausted all free cells and if in all cases the agent won.

```

```

        if win_rate > 0.9 : epsilon = 0.05
        if sum(win_history[-hsize:]) == hsize and completion_check(model, qmaze):
            print("Reached 100%% win rate at epoch: %d" % (epoch,))
            break

    # Determine the total time for training
    dt = datetime.datetime.now() - start_time
    seconds = dt.total_seconds()
    t = format_time(seconds)

    print("n_epoch: %d, max_mem: %d, data: %d, time: %s" % (n_epoch, max_memory, da
    return seconds

def find_open_cells(cells):
    out = []
    for y in range(len(cells)):
        row = cells[y]
        for x in range(len(row)):
            if row[x]==1:
                out.append((x,y))
    return out
def num_wins(history):
    wins = 0
    for i in history:
        if i == "win":
            wins+=1
    return wins

# This is a small utility for printing readable time strings:
def format_time(seconds):
    if seconds < 400:
        s = float(seconds)
        return "%.1f seconds" % (s,)
    elif seconds < 4000:
        m = seconds / 60.0
        return "%.2f minutes" % (m,)
    else:
        h = seconds / 3600.0
        return "%.2f hours" % (h,)

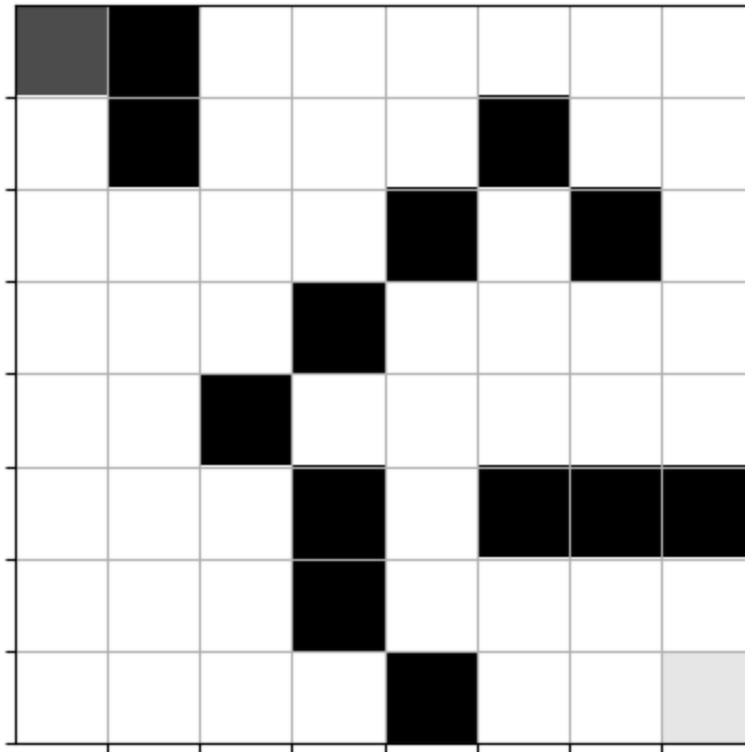
```

Test Your Model

Now we will start testing the deep Q-learning implementation. To begin, select **Cell**, then **Run All** from the menu bar. This will run your notebook. As it runs, you should see output begin to appear beneath the next few cells. The code below creates an instance of `TreasureMaze`.

```
In [10]: qmaze = TreasureMaze(maze)
show(qmaze)
```

```
Out[10]: <matplotlib.image.AxesImage at 0x2af65994bf0>
```



In the next code block, you will build your model and train it using deep Q-learning. Note: This step takes several minutes to fully run.

```
In [11]: model = build_model(maze)
         qtrain(model, maze, epochs=1000, max_memory=8*maze.size, data_size=32)
```

1/1 ————— 0s 51ms/step

b:\Planning and stuff\Projects\SNHU Degree\Term 12 (2025 may-jun)\CS370 Current Trends (AI)\project_2\.venv\Lib\site-packages\keras\src\layers\core\dense.py:93: UserWarning: Do not pass an `input_shape`/`input_dim` argument to a layer. When using Sequential models, prefer using an `Input(shape)` object as the first layer in the model instead.

```
super().__init__(activity_regularizer=activity_regularizer, **kwargs)
```

```
1/1 ————— 0s 63ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 1s 688ms/step - loss: 0.0194
1/1 ————— 0s 96ms/step - loss: 0.0015
1/1 ————— 0s 30ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 29ms/step - loss: 0.0634
1/1 ————— 0s 26ms/step - loss: 0.0453
1/1 ————— 0s 24ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 29ms/step - loss: 0.0271
1/1 ————— 0s 28ms/step - loss: 0.0235
1/1 ————— 0s 24ms/step
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1/1 ————— 0s 23ms/step
1/1 ————— 0s 28ms/step - loss: 0.0318
1/1 ————— 0s 28ms/step - loss: 0.0228
1/1 ————— 0s 27ms/step
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1/1 ————— 0s 23ms/step
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1/1 ————— 0s 23ms/step
1/1 ————— 0s 27ms/step - loss: 0.0288
1/1 ————— 0s 27ms/step - loss: 0.0248
1/1 ————— 0s 28ms/step
1/1 ————— 0s 24ms/step
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1/1 ————— 0s 25ms/step - loss: 0.0246
1/1 ————— 0s 26ms/step - loss: 0.0229
1/1 ————— 0s 24ms/step
1/1 ————— 0s 23ms/step
```



```
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1/1 22ms/step
1/1 22ms/step
1/1 21ms/step
1/1 27ms/step
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1/1 26ms/step
1/1 25ms/step
1/1 24ms/step
1/1 29ms/step
1/1 24ms/step
1/1 24ms/step
1/1 26ms/step - loss: 0.0215
1/1 28ms/step - loss: 0.0200
Epoch: 000/149 | Loss: 0.0200 | Episodes: 7 | Win count: 0 | Win rate: 0.000 | time:
4.6 seconds
1/1 24ms/step
1/1 26ms/step
1/1 27ms/step
1/1 33ms/step
1/1 24ms/step
1/1 22ms/step
1/1 24ms/step
1/1 22ms/step
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1/1 22ms/step
1/1 23ms/step
1/1 24ms/step
1/1 28ms/step - loss: 0.0273
1/1 24ms/step - loss: 0.0244
1/1 21ms/step
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1/1 23ms/step
1/1 24ms/step
1/1 29ms/step - loss: 0.0220
1/1 26ms/step - loss: 0.0197
1/1 23ms/step
1/1 22ms/step
```

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1/1		0s	23ms/step	
1/1		0s	29ms/step	
1/1		0s	31ms/step	
1/1		0s	26ms/step	
1/1		0s	25ms/step	
1/1		0s	23ms/step	
1/1		0s	25ms/step	
1/1		0s	25ms/step	
1/1		0s	24ms/step	
1/1		0s	26ms/step	- loss: 0.0165
1/1		0s	25ms/step	- loss: 0.0152
1/1		0s	24ms/step	
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1/1		0s	23ms/step	
1/1		0s	23ms/step	
1/1		0s	23ms/step	
1/1		0s	25ms/step	- loss: 0.0128
1/1		0s	25ms/step	- loss: 0.0111
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1/1		0s	23ms/step	
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```
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1/1 ————— 0s 24ms/step - loss: 0.0115
1/1 ————— 0s 25ms/step - loss: 0.0124
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1/1 ————— 0s 27ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 23ms/step
1/1 ————— 0s 23ms/step
1/1 ————— 0s 26ms/step - loss: 0.0057
1/1 ————— 0s 26ms/step - loss: 0.0072
Epoch: 001/149 | Loss: 0.0072 | Episodes: 13 | Win count: 0 | Win rate: 0.000 | time
: 11.0 seconds
1/1 ————— 0s 25ms/step
1/1 ————— 0s 24ms/step
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1/1 ————— 0s 21ms/step
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1/1 ————— 0s 25ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 26ms/step - loss: 0.0094
1/1 ————— 0s 25ms/step - loss: 0.0112
1/1 ————— 0s 22ms/step
1/1 ————— 0s 22ms/step
```

1/1		0s	23ms/step	
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1/1		0s	22ms/step	
1/1		0s	23ms/step	
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1/1		0s	23ms/step	
1/1		0s	22ms/step	
1/1		0s	30ms/step	
1/1		0s	29ms/step	
1/1		0s	30ms/step	loss: 0.0115
1/1		0s	29ms/step	loss: 0.0118
1/1		0s	22ms/step	
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1/1		0s	22ms/step	
1/1		0s	23ms/step	
1/1		0s	24ms/step	
1/1		0s	30ms/step	
1/1		0s	24ms/step	
1/1		0s	23ms/step	
1/1		0s	36ms/step	loss: 0.0077
1/1		0s	32ms/step	loss: 0.0080
1/1		0s	27ms/step	
1/1		0s	25ms/step	
1/1		0s	25ms/step	
1/1		0s	25ms/step	
1/1		0s	27ms/step	
1/1		0s	23ms/step	
1/1		0s	24ms/step	
1/1		0s	24ms/step	
1/1		0s	24ms/step	
1/1		0s	37ms/step	
1/1		0s	25ms/step	
1/1		0s	22ms/step	
1/1		0s	22ms/step	
1/1		0s	29ms/step	

```
1/1 ————— 0s 23ms/step
1/1 ————— 0s 22ms/step
1/1 ————— 0s 23ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 34ms/step - loss: 0.0088
1/1 ————— 0s 35ms/step - loss: 0.0088
Epoch: 002/149 | Loss: 0.0088 | Episodes: 17 | Win count: 0 | Win rate: 0.000 | time
: 15.7 seconds
1/1 ————— 0s 22ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 22ms/step
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1/1 ————— 0s 22ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 27ms/step - loss: 0.0126
1/1 ————— 0s 28ms/step - loss: 0.0123
1/1 ————— 0s 26ms/step
1/1 ————— 0s 22ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 23ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 23ms/step
1/1 ————— 0s 23ms/step
1/1 ————— 0s 23ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 23ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 23ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 28ms/step - loss: 0.0068
1/1 ————— 0s 29ms/step - loss: 0.0056
1/1 ————— 0s 27ms/step
1/1 ————— 0s 24ms/step
```

1/1		0s	26ms/step	
1/1		0s	24ms/step	
1/1		0s	28ms/step	
1/1		0s	26ms/step	
1/1		0s	26ms/step	
1/1		0s	26ms/step	
1/1		0s	24ms/step	
1/1		0s	23ms/step	
1/1		0s	29ms/step	
1/1		0s	22ms/step	
1/1		0s	23ms/step	
1/1		0s	23ms/step	
1/1		0s	25ms/step	
1/1		0s	24ms/step	
1/1		0s	26ms/step	
1/1		0s	28ms/step	
1/1		0s	28ms/step	
1/1		0s	30ms/step	
1/1		0s	27ms/step	loss: 0.0031
1/1		0s	36ms/step	loss: 0.0026
1/1		0s	28ms/step	
1/1		0s	25ms/step	
1/1		0s	35ms/step	
1/1		0s	27ms/step	
1/1		0s	24ms/step	
1/1		0s	23ms/step	
1/1		0s	27ms/step	
1/1		0s	32ms/step	
1/1		0s	28ms/step	
1/1		0s	24ms/step	
1/1		0s	25ms/step	
1/1		0s	27ms/step	
1/1		0s	27ms/step	
1/1		0s	27ms/step	
1/1		0s	24ms/step	
1/1		0s	32ms/step	
1/1		0s	43ms/step	
1/1		0s	26ms/step	
1/1		0s	29ms/step	
1/1		0s	27ms/step	
1/1		0s	29ms/step	loss: 0.0087
1/1		0s	27ms/step	loss: 0.0083
1/1		0s	26ms/step	
1/1		0s	28ms/step	
1/1		0s	23ms/step	
1/1		0s	26ms/step	
1/1		0s	24ms/step	
1/1		0s	23ms/step	
1/1		0s	25ms/step	
1/1		0s	29ms/step	
1/1		0s	27ms/step	
1/1		0s	25ms/step	
1/1		0s	26ms/step	
1/1		0s	23ms/step	
1/1		0s	33ms/step	
1/1		0s	22ms/step	

```
1/1 ————— 0s 33ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 30ms/step - loss: 0.0044
1/1 ————— 0s 26ms/step - loss: 0.0038
1/1 ————— 0s 24ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 23ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 29ms/step - loss: 0.0070
1/1 ————— 0s 27ms/step - loss: 0.0063
Epoch: 003/149 | Loss: 0.0063 | Episodes: 23 | Win count: 0 | Win rate: 0.000 | time
: 23.2 seconds
1/1 ————— 0s 24ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 23ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 23ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 22ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 37ms/step - loss: 0.0011
1/1 ————— 0s 28ms/step - loss: 0.0013
1/1 ————— 0s 25ms/step
1/1 ————— 0s 31ms/step
```

1/1	0s	27ms/step	
1/1	0s	31ms/step	
1/1	0s	30ms/step	
1/1	0s	29ms/step	
1/1	0s	24ms/step	
1/1	0s	24ms/step	
1/1	0s	23ms/step	
1/1	0s	31ms/step	
1/1	0s	33ms/step	
1/1	0s	34ms/step	
1/1	0s	34ms/step	
1/1	0s	28ms/step	
1/1	0s	32ms/step	
1/1	0s	28ms/step	
1/1	0s	29ms/step	
1/1	0s	29ms/step	
1/1	0s	25ms/step	
1/1	0s	27ms/step	
1/1	0s	37ms/step	loss: 0.0042
1/1	0s	30ms/step	loss: 0.0043
1/1	0s	26ms/step	
1/1	0s	24ms/step	
1/1	0s	24ms/step	
1/1	0s	25ms/step	
1/1	0s	26ms/step	
1/1	0s	26ms/step	
1/1	0s	28ms/step	
1/1	0s	30ms/step	
1/1	0s	28ms/step	
1/1	0s	27ms/step	
1/1	0s	28ms/step	
1/1	0s	27ms/step	
1/1	0s	28ms/step	
1/1	0s	25ms/step	
1/1	0s	25ms/step	
1/1	0s	25ms/step	
1/1	0s	26ms/step	
1/1	0s	24ms/step	
1/1	0s	25ms/step	
1/1	0s	24ms/step	
1/1	0s	35ms/step	loss: 0.0034
1/1	0s	27ms/step	loss: 0.0035
1/1	0s	24ms/step	
1/1	0s	33ms/step	
1/1	0s	29ms/step	
1/1	0s	26ms/step	
1/1	0s	31ms/step	
1/1	0s	33ms/step	
1/1	0s	26ms/step	
1/1	0s	33ms/step	
1/1	0s	29ms/step	
1/1	0s	25ms/step	
1/1	0s	27ms/step	
1/1	0s	27ms/step	
1/1	0s	24ms/step	
1/1	0s	23ms/step	


```
1/1 ————— 0s 23ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 22ms/step
1/1 ————— 0s 37ms/step - loss: 0.0026
1/1 ————— 0s 26ms/step - loss: 0.0025
Epoch: 004/149 | Loss: 0.0025 | Episodes: 27 | Win count: 0 | Win rate: 0.000 | time
: 28.4 seconds
1/1 ————— 0s 24ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 32ms/step - loss: 0.0015
1/1 ————— 0s 30ms/step - loss: 0.0018
1/1 ————— 0s 27ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 23ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 23ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 38ms/step - loss: 0.0034
1/1 ————— 0s 32ms/step - loss: 0.0035
1/1 ————— 0s 27ms/step
1/1 ————— 0s 34ms/step
```

```
1/1 26ms/step
1/1 23ms/step
1/1 42ms/step
1/1 29ms/step
1/1 26ms/step
1/1 25ms/step
1/1 27ms/step
1/1 26ms/step
1/1 24ms/step
1/1 28ms/step
1/1 29ms/step
1/1 28ms/step
1/1 28ms/step
1/1 30ms/step
1/1 29ms/step
1/1 30ms/step
1/1 26ms/step
1/1 27ms/step
1/1 31ms/step - loss: 0.0025
1/1 30ms/step - loss: 0.0024
Epoch: 005/149 | Loss: 0.0024 | Episodes: 30 | Win count: 0 | Win rate: 0.000 | time
: 32.5 seconds
1/1 25ms/step
1/1 29ms/step
1/1 24ms/step
1/1 37ms/step
1/1 28ms/step
1/1 30ms/step
1/1 30ms/step
1/1 28ms/step
1/1 29ms/step
1/1 27ms/step
1/1 26ms/step
1/1 26ms/step
1/1 37ms/step
1/1 26ms/step
1/1 35ms/step
1/1 36ms/step
1/1 33ms/step
1/1 25ms/step
1/1 30ms/step
1/1 34ms/step
1/1 26ms/step - loss: 0.0026
1/1 31ms/step - loss: 0.0026
1/1 26ms/step
1/1 38ms/step
1/1 28ms/step
1/1 26ms/step
1/1 25ms/step
1/1 27ms/step
1/1 34ms/step
1/1 32ms/step
1/1 27ms/step
1/1 24ms/step
1/1 29ms/step
1/1 29ms/step
```

```
1/1 ————— 0s 30ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 23ms/step
1/1 ————— 0s 22ms/step
1/1 ————— 0s 23ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 30ms/step - loss: 0.0027
1/1 ————— 0s 25ms/step - loss: 0.0027
1/1 ————— 0s 25ms/step
1/1 ————— 0s 23ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 38ms/step - loss: 0.0030
1/1 ————— 0s 29ms/step - loss: 0.0028
1/1 ————— 0s 34ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 23ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 23ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 22ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 32ms/step - loss: 0.0021
1/1 ————— 0s 29ms/step - loss: 0.0020
```

Epoch: 006/149 | Loss: 0.0020 | Episodes: 34 | Win count: 0 | Win rate: 0.000 | time
: 37.8 seconds

1/1		0s	28ms/step	
1/1		0s	24ms/step	
1/1		0s	29ms/step	
1/1		0s	24ms/step	
1/1		0s	29ms/step	
1/1		0s	27ms/step	
1/1		0s	30ms/step	
1/1		0s	36ms/step	
1/1		0s	28ms/step	
1/1		0s	23ms/step	
1/1		0s	27ms/step	
1/1		0s	31ms/step	
1/1		0s	23ms/step	
1/1		0s	29ms/step	
1/1		0s	32ms/step	
1/1		0s	30ms/step	
1/1		0s	28ms/step	
1/1		0s	33ms/step	
1/1		0s	32ms/step	
1/1		0s	33ms/step	
1/1		0s	29ms/step	- loss: 0.0013
1/1		0s	32ms/step	- loss: 0.0014
1/1		0s	28ms/step	
1/1		0s	34ms/step	
1/1		0s	35ms/step	
1/1		0s	35ms/step	
1/1		0s	37ms/step	
1/1		0s	30ms/step	
1/1		0s	35ms/step	
1/1		0s	27ms/step	
1/1		0s	30ms/step	
1/1		0s	30ms/step	
1/1		0s	30ms/step	
1/1		0s	27ms/step	
1/1		0s	34ms/step	
1/1		0s	31ms/step	
1/1		0s	31ms/step	
1/1		0s	27ms/step	
1/1		0s	33ms/step	
1/1		0s	31ms/step	
1/1		0s	33ms/step	
1/1		0s	31ms/step	
1/1		0s	43ms/step	- loss: 0.0039
1/1		0s	41ms/step	- loss: 0.0039
1/1		0s	32ms/step	
1/1		0s	29ms/step	
1/1		0s	27ms/step	
1/1		0s	31ms/step	
1/1		0s	35ms/step	
1/1		0s	34ms/step	
1/1		0s	29ms/step	
1/1		0s	26ms/step	
1/1		0s	28ms/step	
1/1		0s	28ms/step	
1/1		0s	35ms/step	
1/1		0s	32ms/step	

```
1/1 ————— 0s 24ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 35ms/step - loss: 0.0023
1/1 ————— 0s 35ms/step - loss: 0.0022
Epoch: 007/149 | Loss: 0.0022 | Episodes: 37 | Win count: 0 | Win rate: 0.000 | time
: 42.0 seconds
1/1 ————— 0s 27ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 38ms/step - loss: 0.0025
1/1 ————— 0s 30ms/step - loss: 0.0024
1/1 ————— 0s 34ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 31ms/step - loss: 0.0023
1/1 ————— 0s 30ms/step - loss: 0.0022
```

1/1		0s	26ms/step	
1/1		0s	25ms/step	
1/1		0s	29ms/step	
1/1		0s	35ms/step	
1/1		0s	33ms/step	
1/1		0s	28ms/step	
1/1		0s	32ms/step	
1/1		0s	34ms/step	
1/1		0s	37ms/step	
1/1		0s	33ms/step	
1/1		0s	35ms/step	
1/1		0s	28ms/step	
1/1		0s	33ms/step	
1/1		0s	33ms/step	
1/1		0s	27ms/step	
1/1		0s	29ms/step	
1/1		0s	29ms/step	
1/1		0s	25ms/step	
1/1		0s	26ms/step	
1/1		0s	30ms/step	
1/1		0s	56ms/step	- loss: 0.0038
1/1		0s	41ms/step	- loss: 0.0035
1/1		0s	38ms/step	
1/1		0s	27ms/step	
1/1		0s	23ms/step	
1/1		0s	30ms/step	
1/1		0s	37ms/step	
1/1		0s	36ms/step	
1/1		0s	31ms/step	
1/1		0s	32ms/step	
1/1		0s	26ms/step	
1/1		0s	30ms/step	
1/1		0s	30ms/step	
1/1		0s	29ms/step	
1/1		0s	27ms/step	
1/1		0s	27ms/step	
1/1		0s	30ms/step	
1/1		0s	33ms/step	
1/1		0s	36ms/step	
1/1		0s	30ms/step	
1/1		0s	26ms/step	
1/1		0s	26ms/step	
1/1		0s	34ms/step	- loss: 0.0020
1/1		0s	34ms/step	- loss: 0.0020
1/1		0s	29ms/step	
1/1		0s	37ms/step	
1/1		0s	44ms/step	
1/1		0s	31ms/step	
1/1		0s	30ms/step	
1/1		0s	29ms/step	
1/1		0s	32ms/step	
1/1		0s	30ms/step	
1/1		0s	28ms/step	
1/1		0s	34ms/step	
1/1		0s	32ms/step	
1/1		0s	24ms/step	

```
1/1 ————— 0s 30ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 40ms/step - loss: 0.0018
1/1 ————— 0s 38ms/step - loss: 0.0017
1/1 ————— 0s 28ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 37ms/step - loss: 0.0017
1/1 ————— 0s 31ms/step - loss: 0.0017
Epoch: 008/149 | Loss: 0.0017 | Episodes: 43 | Win count: 0 | Win rate: 0.000 | time
: 50.4 seconds
1/1 ————— 0s 31ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 43ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 33ms/step - loss: 0.0031
1/1 ————— 0s 28ms/step - loss: 0.0030
```

1/1		0s	30ms/step	
1/1		0s	28ms/step	
1/1		0s	27ms/step	
1/1		0s	30ms/step	
1/1		0s	30ms/step	
1/1		0s	31ms/step	
1/1		0s	28ms/step	
1/1		0s	31ms/step	
1/1		0s	29ms/step	
1/1		0s	35ms/step	
1/1		0s	38ms/step	
1/1		0s	25ms/step	
1/1		0s	27ms/step	
1/1		0s	32ms/step	
1/1		0s	26ms/step	
1/1		0s	28ms/step	
1/1		0s	28ms/step	
1/1		0s	30ms/step	
1/1		0s	32ms/step	
1/1		0s	27ms/step	
1/1		0s	37ms/step	- loss: 0.0022
1/1		0s	34ms/step	- loss: 0.0022
1/1		0s	27ms/step	
1/1		0s	24ms/step	
1/1		0s	31ms/step	
1/1		0s	28ms/step	
1/1		0s	25ms/step	
1/1		0s	32ms/step	
1/1		0s	35ms/step	
1/1		0s	38ms/step	
1/1		0s	27ms/step	
1/1		0s	28ms/step	
1/1		0s	24ms/step	
1/1		0s	26ms/step	
1/1		0s	33ms/step	
1/1		0s	25ms/step	
1/1		0s	37ms/step	
1/1		0s	32ms/step	
1/1		0s	36ms/step	
1/1		0s	29ms/step	
1/1		0s	31ms/step	
1/1		0s	28ms/step	
1/1		0s	31ms/step	- loss: 0.0013
1/1		0s	33ms/step	- loss: 0.0013
1/1		0s	29ms/step	
1/1		0s	27ms/step	
1/1		0s	31ms/step	
1/1		0s	35ms/step	
1/1		0s	31ms/step	
1/1		0s	31ms/step	
1/1		0s	36ms/step	
1/1		0s	29ms/step	
1/1		0s	32ms/step	
1/1		0s	24ms/step	
1/1		0s	31ms/step	
1/1		0s	28ms/step	


```
1/1 ————— 0s 29ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 34ms/step - loss: 0.0029
1/1 ————— 0s 36ms/step - loss: 0.0028
Epoch: 009/149 | Loss: 0.0028 | Episodes: 47 | Win count: 0 | Win rate: 0.000 | time
: 56.1 seconds
1/1 ————— 0s 34ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 23ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 39ms/step - loss: 0.0034
1/1 ————— 0s 31ms/step - loss: 0.0031
1/1 ————— 0s 25ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 35ms/step - loss: 0.0023
1/1 ————— 0s 35ms/step - loss: 0.0021
```

1/1		0s	27ms/step	
1/1		0s	25ms/step	
1/1		0s	29ms/step	
1/1		0s	40ms/step	
1/1		0s	33ms/step	
1/1		0s	34ms/step	
1/1		0s	33ms/step	
1/1		0s	25ms/step	
1/1		0s	26ms/step	
1/1		0s	31ms/step	
1/1		0s	26ms/step	
1/1		0s	27ms/step	
1/1		0s	26ms/step	
1/1		0s	35ms/step	
1/1		0s	33ms/step	
1/1		0s	29ms/step	
1/1		0s	36ms/step	
1/1		0s	33ms/step	
1/1		0s	32ms/step	
1/1		0s	26ms/step	
1/1		0s	39ms/step	- loss: 0.0020
1/1		0s	34ms/step	- loss: 0.0021
1/1		0s	29ms/step	
1/1		0s	28ms/step	
1/1		0s	32ms/step	
1/1		0s	26ms/step	
1/1		0s	28ms/step	
1/1		0s	28ms/step	
1/1		0s	31ms/step	
1/1		0s	30ms/step	
1/1		0s	28ms/step	
1/1		0s	24ms/step	
1/1		0s	31ms/step	
1/1		0s	28ms/step	
1/1		0s	32ms/step	
1/1		0s	34ms/step	
1/1		0s	30ms/step	
1/1		0s	30ms/step	
1/1		0s	34ms/step	
1/1		0s	32ms/step	
1/1		0s	27ms/step	
1/1		0s	37ms/step	
1/1		0s	34ms/step	- loss: 0.0019
1/1		0s	37ms/step	- loss: 0.0019
1/1		0s	33ms/step	
1/1		0s	31ms/step	
1/1		0s	30ms/step	
1/1		0s	29ms/step	
1/1		0s	34ms/step	
1/1		0s	36ms/step	
1/1		0s	40ms/step	
1/1		0s	37ms/step	
1/1		0s	35ms/step	
1/1		0s	35ms/step	
1/1		0s	37ms/step	
1/1		0s	34ms/step	

```
1/1 ————— 0s 33ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 34ms/step - loss: 9.7708e-04
1/1 ————— 0s 32ms/step - loss: 8.1414e-04
1/1 ————— 0s 33ms/step
1/1 ————— 0s 43ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 44ms/step - loss: 0.0030
1/1 ————— 0s 40ms/step - loss: 0.0030
1/1 ————— 0s 27ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 38ms/step - loss: 0.0036
1/1 ————— 0s 30ms/step - loss: 0.0034
```

Epoch: 010/149 | Loss: 0.0034 | Episodes: 54 | Win count: 0 | Win rate: 0.000 | time
: 66.1 seconds

1/1		0s	33ms/step	
1/1		0s	33ms/step	
1/1		0s	34ms/step	
1/1		0s	31ms/step	
1/1		0s	31ms/step	
1/1		0s	31ms/step	
1/1		0s	30ms/step	
1/1		0s	26ms/step	
1/1		0s	34ms/step	
1/1		0s	33ms/step	
1/1		0s	31ms/step	
1/1		0s	28ms/step	
1/1		0s	32ms/step	
1/1		0s	35ms/step	
1/1		0s	28ms/step	
1/1		0s	31ms/step	
1/1		0s	27ms/step	
1/1		0s	31ms/step	
1/1		0s	30ms/step	
1/1		0s	26ms/step	
1/1		0s	30ms/step	- loss: 0.0022
1/1		0s	34ms/step	- loss: 0.0022
1/1		0s	35ms/step	
1/1		0s	28ms/step	
1/1		0s	28ms/step	
1/1		0s	29ms/step	
1/1		0s	25ms/step	
1/1		0s	32ms/step	
1/1		0s	32ms/step	
1/1		0s	29ms/step	
1/1		0s	28ms/step	
1/1		0s	29ms/step	
1/1		0s	38ms/step	
1/1		0s	33ms/step	
1/1		0s	25ms/step	
1/1		0s	34ms/step	
1/1		0s	31ms/step	
1/1		0s	31ms/step	
1/1		0s	28ms/step	
1/1		0s	34ms/step	
1/1		0s	36ms/step	
1/1		0s	30ms/step	
1/1		0s	34ms/step	- loss: 9.9292e-04
1/1		0s	35ms/step	- loss: 9.3118e-04
1/1		0s	28ms/step	
1/1		0s	30ms/step	
1/1		0s	30ms/step	
1/1		0s	34ms/step	
1/1		0s	25ms/step	
1/1		0s	29ms/step	
1/1		0s	33ms/step	
1/1		0s	32ms/step	
1/1		0s	27ms/step	
1/1		0s	36ms/step	
1/1		0s	25ms/step	
1/1		0s	23ms/step	

```
1/1 ————— 0s 28ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 38ms/step - loss: 0.0018
1/1 ————— 0s 30ms/step - loss: 0.0019
1/1 ————— 0s 34ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 49ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 37ms/step - loss: 0.0026
1/1 ————— 0s 32ms/step - loss: 0.0024
1/1 ————— 0s 31ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 23ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 37ms/step - loss: 0.0038
1/1 ————— 0s 30ms/step - loss: 0.0035
```

Epoch: 011/149 | Loss: 0.0035 | Episodes: 59 | Win count: 0 | Win rate: 0.000 | time
: 73.4 seconds

1/1	0s	31ms/step	
1/1	0s	32ms/step	
1/1	0s	27ms/step	
1/1	0s	30ms/step	
1/1	0s	29ms/step	
1/1	0s	30ms/step	
1/1	0s	29ms/step	
1/1	0s	28ms/step	
1/1	0s	35ms/step	
1/1	0s	34ms/step	
1/1	0s	32ms/step	
1/1	0s	32ms/step	
1/1	0s	33ms/step	
1/1	0s	33ms/step	
1/1	0s	29ms/step	
1/1	0s	28ms/step	
1/1	0s	29ms/step	
1/1	0s	32ms/step	
1/1	0s	29ms/step	
1/1	0s	35ms/step	
1/1	0s	38ms/step	- loss: 0.0028
1/1	0s	32ms/step	- loss: 0.0029
1/1	0s	32ms/step	
1/1	0s	30ms/step	
1/1	0s	32ms/step	
1/1	0s	39ms/step	
1/1	0s	29ms/step	
1/1	0s	28ms/step	
1/1	0s	33ms/step	
1/1	0s	31ms/step	
1/1	0s	38ms/step	
1/1	0s	28ms/step	
1/1	0s	34ms/step	
1/1	0s	38ms/step	
1/1	0s	29ms/step	
1/1	0s	29ms/step	
1/1	0s	31ms/step	
1/1	0s	26ms/step	
1/1	0s	29ms/step	
1/1	0s	30ms/step	
1/1	0s	28ms/step	
1/1	0s	31ms/step	
1/1	0s	29ms/step	- loss: 0.0035
1/1	0s	37ms/step	- loss: 0.0034
1/1	0s	28ms/step	
1/1	0s	31ms/step	
1/1	0s	33ms/step	
1/1	0s	26ms/step	
1/1	0s	32ms/step	
1/1	0s	33ms/step	
1/1	0s	27ms/step	
1/1	0s	26ms/step	
1/1	0s	30ms/step	
1/1	0s	34ms/step	
1/1	0s	25ms/step	
1/1	0s	26ms/step	

```
1/1 ————— 0s 32ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 32ms/step - loss: 0.0028
1/1 ————— 0s 37ms/step - loss: 0.0027
Epoch: 012/149 | Loss: 0.0027 | Episodes: 62 | Win count: 0 | Win rate: 0.000 | time
: 77.7 seconds
1/1 ————— 0s 33ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 23ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 38ms/step - loss: 0.0028
1/1 ————— 0s 38ms/step - loss: 0.0029
1/1 ————— 0s 31ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 31ms/step - loss: 0.0026
1/1 ————— 0s 32ms/step - loss: 0.0028
```

1/1		0s	42ms/step	
1/1		0s	27ms/step	
1/1		0s	30ms/step	
1/1		0s	29ms/step	
1/1		0s	36ms/step	
1/1		0s	26ms/step	
1/1		0s	32ms/step	
1/1		0s	26ms/step	
1/1		0s	29ms/step	
1/1		0s	34ms/step	
1/1		0s	27ms/step	
1/1		0s	28ms/step	
1/1		0s	30ms/step	
1/1		0s	30ms/step	
1/1		0s	34ms/step	
1/1		0s	32ms/step	
1/1		0s	29ms/step	
1/1		0s	34ms/step	
1/1		0s	29ms/step	
1/1		0s	29ms/step	
1/1		0s	33ms/step	- loss: 0.0025
1/1		0s	30ms/step	- loss: 0.0025
1/1		0s	26ms/step	
1/1		0s	25ms/step	
1/1		0s	28ms/step	
1/1		0s	32ms/step	
1/1		0s	28ms/step	
1/1		0s	34ms/step	
1/1		0s	35ms/step	
1/1		0s	29ms/step	
1/1		0s	31ms/step	
1/1		0s	38ms/step	
1/1		0s	31ms/step	
1/1		0s	31ms/step	
1/1		0s	29ms/step	
1/1		0s	32ms/step	
1/1		0s	35ms/step	
1/1		0s	29ms/step	
1/1		0s	32ms/step	
1/1		0s	23ms/step	
1/1		0s	28ms/step	
1/1		0s	29ms/step	
1/1		0s	29ms/step	- loss: 0.0038
1/1		0s	36ms/step	- loss: 0.0035
1/1		0s	35ms/step	
1/1		0s	29ms/step	
1/1		0s	25ms/step	
1/1		0s	27ms/step	
1/1		0s	32ms/step	
1/1		0s	35ms/step	
1/1		0s	35ms/step	
1/1		0s	31ms/step	
1/1		0s	40ms/step	
1/1		0s	27ms/step	
1/1		0s	29ms/step	
1/1		0s	28ms/step	


```
1/1 ————— 0s 24ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 42ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 30ms/step - loss: 0.0030
1/1 ————— 0s 37ms/step - loss: 0.0031
Epoch: 013/149 | Loss: 0.0031 | Episodes: 67 | Win count: 0 | Win rate: 0.000 | time
: 84.7 seconds
1/1 ————— 0s 30ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 31ms/step - loss: 0.0034
1/1 ————— 0s 31ms/step - loss: 0.0032
1/1 ————— 0s 25ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 22ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 32ms/step - loss: 0.0016
1/1 ————— 0s 35ms/step - loss: 0.0016
```

```
1/1 ————— 0s 27ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 23ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 42ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 32ms/step - loss: 0.0024
1/1 ————— 0s 29ms/step - loss: 0.0023
1/1 ————— 0s 28ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 34ms/step - loss: 0.0020
1/1 ————— 0s 32ms/step - loss: 0.0018
Epoch: 014/149 | Loss: 0.0018 | Episodes: 71 | Win count: 0 | Win rate: 0.000 | time
: 90.5 seconds
Epoch: 015/149 | Loss: 0.0018 | Episodes: 71 | Win count: 1 | Win rate: 0.062 | time
: 90.5 seconds
1/1 ————— 0s 30ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 46ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 36ms/step
```

1/1		0s	32ms/step	
1/1		0s	25ms/step	
1/1		0s	29ms/step	
1/1		0s	35ms/step	
1/1		0s	27ms/step	
1/1		0s	30ms/step	
1/1		0s	27ms/step	
1/1		0s	28ms/step	
1/1		0s	28ms/step	
1/1		0s	32ms/step	
1/1		0s	35ms/step	
1/1		0s	36ms/step	
1/1		0s	31ms/step	- loss: 0.0029
1/1		0s	35ms/step	- loss: 0.0029
1/1		0s	32ms/step	
1/1		0s	38ms/step	
1/1		0s	38ms/step	
1/1		0s	24ms/step	
1/1		0s	27ms/step	
1/1		0s	30ms/step	
1/1		0s	31ms/step	
1/1		0s	30ms/step	
1/1		0s	26ms/step	
1/1		0s	30ms/step	
1/1		0s	30ms/step	
1/1		0s	29ms/step	
1/1		0s	25ms/step	
1/1		0s	33ms/step	
1/1		0s	29ms/step	
1/1		0s	38ms/step	
1/1		0s	31ms/step	
1/1		0s	27ms/step	
1/1		0s	33ms/step	
1/1		0s	40ms/step	
1/1		0s	38ms/step	- loss: 0.0028
1/1		0s	33ms/step	- loss: 0.0025
1/1		0s	41ms/step	
1/1		0s	28ms/step	
1/1		0s	26ms/step	
1/1		0s	25ms/step	
1/1		0s	27ms/step	
1/1		0s	25ms/step	
1/1		0s	25ms/step	
1/1		0s	32ms/step	
1/1		0s	27ms/step	
1/1		0s	33ms/step	
1/1		0s	28ms/step	
1/1		0s	44ms/step	
1/1		0s	33ms/step	
1/1		0s	34ms/step	
1/1		0s	33ms/step	
1/1		0s	32ms/step	
1/1		0s	33ms/step	
1/1		0s	25ms/step	
1/1		0s	33ms/step	
1/1		0s	24ms/step	

```
1/1 ————— 0s 35ms/step - loss: 0.0023
1/1 ————— 0s 33ms/step - loss: 0.0023
1/1 ————— 0s 25ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 31ms/step - loss: 0.0031
1/1 ————— 0s 33ms/step - loss: 0.0030
```

Epoch: 016/149 | Loss: 0.0030 | Episodes: 75 | Win count: 1 | Win rate: 0.059 | time
: 96.4 seconds

```
1/1 ————— 0s 26ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 23ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 35ms/step - loss: 0.0019
1/1 ————— 0s 35ms/step - loss: 0.0019
1/1 ————— 0s 25ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 30ms/step
```

1/1	0s	27ms/step	
1/1	0s	29ms/step	
1/1	0s	30ms/step	
1/1	0s	27ms/step	
1/1	0s	29ms/step	
1/1	0s	33ms/step	
1/1	0s	36ms/step	
1/1	0s	26ms/step	
1/1	0s	29ms/step	
1/1	0s	29ms/step	
1/1	0s	28ms/step	
1/1	0s	34ms/step	
1/1	0s	35ms/step	- loss: 0.0020
1/1	0s	52ms/step	- loss: 0.0020
1/1	0s	29ms/step	
1/1	0s	29ms/step	
1/1	0s	30ms/step	
1/1	0s	29ms/step	
1/1	0s	27ms/step	
1/1	0s	35ms/step	
1/1	0s	30ms/step	
1/1	0s	24ms/step	
1/1	0s	27ms/step	
1/1	0s	31ms/step	
1/1	0s	29ms/step	
1/1	0s	29ms/step	
1/1	0s	32ms/step	
1/1	0s	27ms/step	
1/1	0s	30ms/step	
1/1	0s	35ms/step	
1/1	0s	31ms/step	
1/1	0s	26ms/step	
1/1	0s	39ms/step	
1/1	0s	36ms/step	
1/1	0s	40ms/step	- loss: 0.0035
1/1	0s	31ms/step	- loss: 0.0037
1/1	0s	34ms/step	
1/1	0s	27ms/step	
1/1	0s	26ms/step	
1/1	0s	25ms/step	
1/1	0s	31ms/step	
1/1	0s	31ms/step	
1/1	0s	33ms/step	
1/1	0s	36ms/step	
1/1	0s	30ms/step	
1/1	0s	29ms/step	
1/1	0s	30ms/step	
1/1	0s	31ms/step	
1/1	0s	29ms/step	
1/1	0s	27ms/step	
1/1	0s	35ms/step	
1/1	0s	33ms/step	
1/1	0s	29ms/step	
1/1	0s	31ms/step	
1/1	0s	31ms/step	
1/1	0s	28ms/step	

```
1/1 ██████████ 0s 32ms/step - loss: 0.0024
1/1 ██████████ 0s 28ms/step - loss: 0.0023
Epoch: 017/149 | Loss: 0.0023 | Episodes: 79 | Win count: 1 | Win rate: 0.056 | time
: 102.1 seconds
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 45ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 24ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 26ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 27ms/step
1/1 ██████████ 0s 27ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 26ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 37ms/step - loss: 0.0039
1/1 ██████████ 0s 40ms/step - loss: 0.0036
1/1 ██████████ 0s 27ms/step
1/1 ██████████ 0s 25ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 25ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 26ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 25ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 25ms/step
1/1 ██████████ 0s 32ms/step - loss: 0.0049
1/1 ██████████ 0s 34ms/step - loss: 0.0040
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 25ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 52ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 25ms/step
1/1 ██████████ 0s 29ms/step
```

```
1/1 ————— 0s 29ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 42ms/step
1/1 ————— 0s 29ms/step - loss: 0.0038
1/1 ————— 0s 42ms/step - loss: 0.0036
Epoch: 018/149 | Loss: 0.0036 | Episodes: 82 | Win count: 1 | Win rate: 0.053 | time
: 106.4 seconds
1/1 ————— 0s 32ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 39ms/step - loss: 0.0021
1/1 ————— 0s 31ms/step - loss: 0.0025
1/1 ————— 0s 30ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 38ms/step
```

```
1/1 26ms/step
1/1 27ms/step
1/1 31ms/step - loss: 0.0022
1/1 28ms/step - loss: 0.0023
1/1 35ms/step
1/1 31ms/step
1/1 28ms/step
1/1 28ms/step
1/1 31ms/step
1/1 31ms/step
1/1 29ms/step
1/1 33ms/step
1/1 34ms/step
1/1 35ms/step
1/1 38ms/step
1/1 41ms/step
1/1 33ms/step
1/1 33ms/step
1/1 31ms/step
1/1 35ms/step
1/1 28ms/step
1/1 30ms/step
1/1 29ms/step
1/1 29ms/step
1/1 27ms/step - loss: 0.0036
1/1 50ms/step - loss: 0.0038
1/1 32ms/step
1/1 34ms/step
1/1 29ms/step
1/1 29ms/step
1/1 31ms/step
1/1 31ms/step
1/1 29ms/step
1/1 40ms/step
1/1 43ms/step
1/1 33ms/step
1/1 30ms/step
1/1 27ms/step
1/1 26ms/step
1/1 28ms/step
1/1 39ms/step
1/1 26ms/step
1/1 29ms/step
1/1 25ms/step
1/1 31ms/step
1/1 25ms/step
1/1 29ms/step - loss: 0.0027
1/1 34ms/step - loss: 0.0028
Epoch: 019/149 | Loss: 0.0028 | Episodes: 86 | Win count: 1 | Win rate: 0.050 | time
: 112.2 seconds
1/1 27ms/step
1/1 27ms/step
1/1 30ms/step
1/1 26ms/step
1/1 29ms/step
1/1 37ms/step
```


1/1		0s	32ms/step	
1/1		0s	31ms/step	
1/1		0s	28ms/step	
1/1		0s	27ms/step	
1/1		0s	26ms/step	
1/1		0s	34ms/step	
1/1		0s	27ms/step	
1/1		0s	28ms/step	
1/1		0s	32ms/step	
1/1		0s	32ms/step	
1/1		0s	30ms/step	
1/1		0s	31ms/step	
1/1		0s	30ms/step	
1/1		0s	31ms/step	
1/1		0s	36ms/step	- loss: 0.0033
1/1		0s	32ms/step	- loss: 0.0030
1/1		0s	33ms/step	
1/1		0s	39ms/step	
1/1		0s	35ms/step	
1/1		0s	28ms/step	
1/1		0s	45ms/step	
1/1		0s	24ms/step	
1/1		0s	28ms/step	
1/1		0s	32ms/step	
1/1		0s	29ms/step	
1/1		0s	34ms/step	
1/1		0s	27ms/step	
1/1		0s	29ms/step	
1/1		0s	34ms/step	
1/1		0s	29ms/step	
1/1		0s	27ms/step	
1/1		0s	27ms/step	
1/1		0s	29ms/step	
1/1		0s	30ms/step	
1/1		0s	38ms/step	
1/1		0s	35ms/step	
1/1		0s	32ms/step	- loss: 0.0037
1/1		0s	31ms/step	- loss: 0.0030
1/1		0s	35ms/step	
1/1		0s	31ms/step	
1/1		0s	29ms/step	
1/1		0s	32ms/step	
1/1		0s	24ms/step	
1/1		0s	28ms/step	
1/1		0s	30ms/step	
1/1		0s	25ms/step	
1/1		0s	25ms/step	
1/1		0s	27ms/step	
1/1		0s	30ms/step	
1/1		0s	32ms/step	
1/1		0s	29ms/step	
1/1		0s	31ms/step	
1/1		0s	29ms/step	
1/1		0s	31ms/step	
1/1		0s	30ms/step	
1/1		0s	32ms/step	

```
1/1 ————— 0s 33ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 33ms/step - loss: 0.0023
1/1 ————— 0s 30ms/step - loss: 0.0022
1/1 ————— 0s 38ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 31ms/step - loss: 0.0022
1/1 ————— 0s 33ms/step - loss: 0.0024
Epoch: 020/149 | Loss: 0.0024 | Episodes: 90 | Win count: 1 | Win rate: 0.048 | time
: 117.8 seconds
1/1 ————— 0s 30ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 45ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 33ms/step - loss: 0.0020
1/1 ————— 0s 45ms/step - loss: 0.0022
1/1 ————— 0s 30ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 30ms/step
```

1/1	<div></div>	0s	35ms/step	
1/1	<div></div>	0s	30ms/step	
1/1	<div></div>	0s	30ms/step	
1/1	<div></div>	0s	29ms/step	
1/1	<div></div>	0s	29ms/step	
1/1	<div></div>	0s	27ms/step	
1/1	<div></div>	0s	26ms/step	
1/1	<div></div>	0s	29ms/step	
1/1	<div></div>	0s	24ms/step	
1/1	<div></div>	0s	36ms/step	
1/1	<div></div>	0s	31ms/step	
1/1	<div></div>	0s	32ms/step	
1/1	<div></div>	0s	28ms/step	
1/1	<div></div>	0s	27ms/step	
1/1	<div></div>	0s	31ms/step	- loss: 0.0020
1/1	<div></div>	0s	29ms/step	- loss: 0.0022
1/1	<div></div>	0s	31ms/step	
1/1	<div></div>	0s	40ms/step	
1/1	<div></div>	0s	36ms/step	
1/1	<div></div>	0s	27ms/step	
1/1	<div></div>	0s	29ms/step	
1/1	<div></div>	0s	29ms/step	
1/1	<div></div>	0s	39ms/step	
1/1	<div></div>	0s	37ms/step	
1/1	<div></div>	0s	35ms/step	
1/1	<div></div>	0s	28ms/step	
1/1	<div></div>	0s	26ms/step	
1/1	<div></div>	0s	38ms/step	
1/1	<div></div>	0s	32ms/step	
1/1	<div></div>	0s	30ms/step	
1/1	<div></div>	0s	36ms/step	
1/1	<div></div>	0s	33ms/step	
1/1	<div></div>	0s	36ms/step	
1/1	<div></div>	0s	35ms/step	
1/1	<div></div>	0s	29ms/step	
1/1	<div></div>	0s	38ms/step	
1/1	<div></div>	0s	37ms/step	- loss: 0.0037
1/1	<div></div>	0s	35ms/step	- loss: 0.0038
1/1	<div></div>	0s	29ms/step	
1/1	<div></div>	0s	43ms/step	
1/1	<div></div>	0s	30ms/step	
1/1	<div></div>	0s	27ms/step	
1/1	<div></div>	0s	28ms/step	
1/1	<div></div>	0s	39ms/step	
1/1	<div></div>	0s	26ms/step	
1/1	<div></div>	0s	29ms/step	
1/1	<div></div>	0s	30ms/step	
1/1	<div></div>	0s	27ms/step	
1/1	<div></div>	0s	31ms/step	
1/1	<div></div>	0s	31ms/step	
1/1	<div></div>	0s	29ms/step	
1/1	<div></div>	0s	41ms/step	
1/1	<div></div>	0s	33ms/step	
1/1	<div></div>	0s	36ms/step	
1/1	<div></div>	0s	34ms/step	
1/1	<div></div>	0s	31ms/step	

```
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 34ms/step - loss: 0.0041
1/1 ██████████ 0s 28ms/step - loss: 0.0037
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 41ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 27ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 35ms/step - loss: 0.0031
1/1 ██████████ 0s 33ms/step - loss: 0.0029
1/1 ██████████ 0s 26ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 25ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 42ms/step
1/1 ██████████ 0s 25ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 26ms/step
1/1 ██████████ 0s 25ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 27ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 38ms/step - loss: 0.0041
1/1 ██████████ 0s 32ms/step - loss: 0.0037
Epoch: 021/149 | Loss: 0.0037 | Episodes: 96 | Win count: 1 | Win rate: 0.045 | time
: 126.6 seconds
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 41ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 40ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 29ms/step
```

1/1		0s	25ms/step	
1/1		0s	27ms/step	
1/1		0s	27ms/step	
1/1		0s	26ms/step	
1/1		0s	33ms/step	
1/1		0s	37ms/step	
1/1		0s	32ms/step	
1/1		0s	41ms/step	
1/1		0s	35ms/step	
1/1		0s	30ms/step	
1/1		0s	28ms/step	
1/1		0s	34ms/step	
1/1		0s	44ms/step	
1/1		0s	36ms/step	
1/1		0s	39ms/step	- loss: 0.0023
1/1		0s	36ms/step	- loss: 0.0021
1/1		0s	33ms/step	
1/1		0s	28ms/step	
1/1		0s	29ms/step	
1/1		0s	35ms/step	
1/1		0s	30ms/step	
1/1		0s	28ms/step	
1/1		0s	33ms/step	
1/1		0s	30ms/step	
1/1		0s	29ms/step	
1/1		0s	40ms/step	
1/1		0s	36ms/step	
1/1		0s	37ms/step	
1/1		0s	32ms/step	
1/1		0s	33ms/step	
1/1		0s	28ms/step	
1/1		0s	31ms/step	
1/1		0s	32ms/step	
1/1		0s	43ms/step	
1/1		0s	37ms/step	
1/1		0s	28ms/step	
1/1		0s	30ms/step	- loss: 0.0027
1/1		0s	43ms/step	- loss: 0.0031
1/1		0s	28ms/step	
1/1		0s	23ms/step	
1/1		0s	31ms/step	
1/1		0s	29ms/step	
1/1		0s	28ms/step	
1/1		0s	45ms/step	
1/1		0s	29ms/step	
1/1		0s	27ms/step	
1/1		0s	35ms/step	
1/1		0s	32ms/step	
1/1		0s	42ms/step	
1/1		0s	31ms/step	
1/1		0s	51ms/step	
1/1		0s	38ms/step	
1/1		0s	38ms/step	
1/1		0s	37ms/step	
1/1		0s	30ms/step	
1/1		0s	34ms/step	

```
1/1 ██████████ 0s 49ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 30ms/step - loss: 0.0034
1/1 ██████████ 0s 28ms/step - loss: 0.0034
1/1 ██████████ 0s 27ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 27ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 27ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 33ms/step - loss: 0.0012
1/1 ██████████ 0s 43ms/step - loss: 0.0012
Epoch: 022/149 | Loss: 0.0012 | Episodes: 100 | Win count: 1 | Win rate: 0.043 | time: 132.6 seconds
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 40ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 25ms/step
1/1 ██████████ 0s 25ms/step
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 24ms/step
1/1 ██████████ 0s 26ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 24ms/step
1/1 ██████████ 0s 27ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 26ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 35ms/step - loss: 0.0026
1/1 ██████████ 0s 40ms/step - loss: 0.0024
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 25ms/step
1/1 ██████████ 0s 25ms/step
```

```
1/1 ————— 0s 40ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 44ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 39ms/step - loss: 0.0016
1/1 ————— 0s 34ms/step - loss: 0.0016
1/1 ————— 0s 24ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 30ms/step - loss: 0.0029
1/1 ————— 0s 30ms/step - loss: 0.0027
Epoch: 023/149 | Loss: 0.0027 | Episodes: 103 | Win count: 1 | Win rate: 0.042 | time: 136.9 seconds
1/1 ————— 0s 30ms/step
1/1 ————— 0s 23ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 24ms/step
```

1/1	0s	26ms/step	
1/1	0s	28ms/step	
1/1	0s	24ms/step	
1/1	0s	25ms/step	
1/1	0s	28ms/step	- loss: 0.0020
1/1	0s	34ms/step	- loss: 0.0019
1/1	0s	32ms/step	
1/1	0s	27ms/step	
1/1	0s	30ms/step	
1/1	0s	30ms/step	
1/1	0s	24ms/step	
1/1	0s	26ms/step	
1/1	0s	28ms/step	
1/1	0s	33ms/step	
1/1	0s	33ms/step	
1/1	0s	30ms/step	
1/1	0s	31ms/step	
1/1	0s	29ms/step	
1/1	0s	30ms/step	
1/1	0s	29ms/step	
1/1	0s	31ms/step	
1/1	0s	31ms/step	
1/1	0s	26ms/step	
1/1	0s	35ms/step	
1/1	0s	32ms/step	
1/1	0s	27ms/step	
1/1	0s	37ms/step	- loss: 0.0021
1/1	0s	31ms/step	- loss: 0.0020
1/1	0s	28ms/step	
1/1	0s	32ms/step	
1/1	0s	25ms/step	
1/1	0s	38ms/step	
1/1	0s	30ms/step	
1/1	0s	32ms/step	
1/1	0s	29ms/step	
1/1	0s	29ms/step	
1/1	0s	45ms/step	
1/1	0s	33ms/step	
1/1	0s	31ms/step	
1/1	0s	24ms/step	
1/1	0s	28ms/step	
1/1	0s	28ms/step	
1/1	0s	34ms/step	
1/1	0s	43ms/step	
1/1	0s	31ms/step	
1/1	0s	30ms/step	
1/1	0s	29ms/step	
1/1	0s	28ms/step	
1/1	0s	28ms/step	- loss: 0.0029
1/1	0s	30ms/step	- loss: 0.0028
1/1	0s	35ms/step	
1/1	0s	33ms/step	
1/1	0s	28ms/step	
1/1	0s	28ms/step	
1/1	0s	25ms/step	
1/1	0s	29ms/step	


```
1/1 29ms/step
1/1 30ms/step
1/1 34ms/step
1/1 27ms/step
1/1 28ms/step
1/1 35ms/step
1/1 27ms/step
1/1 28ms/step
1/1 24ms/step
1/1 28ms/step
1/1 27ms/step
1/1 30ms/step
1/1 33ms/step
1/1 28ms/step
1/1 37ms/step - loss: 0.0026
1/1 33ms/step - loss: 0.0025
Epoch: 024/149 | Loss: 0.0025 | Episodes: 107 | Win count: 1 | Win rate: 0.040 | time: 142.5 seconds
1/1 28ms/step
1/1 29ms/step
1/1 24ms/step
1/1 25ms/step
1/1 22ms/step
1/1 26ms/step
1/1 31ms/step
1/1 29ms/step
1/1 31ms/step
1/1 24ms/step
1/1 28ms/step
1/1 29ms/step
1/1 30ms/step
1/1 29ms/step
1/1 26ms/step
1/1 27ms/step
1/1 26ms/step
1/1 29ms/step
1/1 30ms/step
1/1 29ms/step
1/1 31ms/step - loss: 0.0013
1/1 28ms/step - loss: 0.0014
1/1 26ms/step
1/1 29ms/step
1/1 27ms/step
1/1 33ms/step
1/1 33ms/step
1/1 30ms/step
1/1 27ms/step
1/1 31ms/step
1/1 23ms/step
1/1 26ms/step
1/1 26ms/step
1/1 27ms/step
1/1 30ms/step
1/1 27ms/step
1/1 33ms/step
1/1 39ms/step
```

1/1	0s	29ms/step	
1/1	0s	31ms/step	
1/1	0s	26ms/step	
1/1	0s	30ms/step	
1/1	0s	34ms/step	- loss: 0.0042
1/1	0s	35ms/step	- loss: 0.0041
1/1	0s	37ms/step	
1/1	0s	33ms/step	
1/1	0s	27ms/step	
1/1	0s	29ms/step	
1/1	0s	31ms/step	
1/1	0s	32ms/step	
1/1	0s	32ms/step	
1/1	0s	32ms/step	
1/1	0s	32ms/step	
1/1	0s	37ms/step	
1/1	0s	38ms/step	
1/1	0s	37ms/step	
1/1	0s	27ms/step	
1/1	0s	27ms/step	
1/1	0s	31ms/step	
1/1	0s	29ms/step	
1/1	0s	31ms/step	
1/1	0s	28ms/step	
1/1	0s	25ms/step	
1/1	0s	30ms/step	
1/1	0s	31ms/step	- loss: 0.0029
1/1	0s	29ms/step	- loss: 0.0029
1/1	0s	31ms/step	
1/1	0s	32ms/step	
1/1	0s	29ms/step	
1/1	0s	29ms/step	
1/1	0s	28ms/step	
1/1	0s	28ms/step	
1/1	0s	28ms/step	
1/1	0s	36ms/step	
1/1	0s	46ms/step	
1/1	0s	28ms/step	
1/1	0s	24ms/step	
1/1	0s	29ms/step	
1/1	0s	28ms/step	
1/1	0s	27ms/step	
1/1	0s	24ms/step	
1/1	0s	31ms/step	
1/1	0s	30ms/step	
1/1	0s	26ms/step	
1/1	0s	24ms/step	
1/1	0s	28ms/step	
1/1	0s	40ms/step	- loss: 0.0021
1/1	0s	44ms/step	- loss: 0.0021
1/1	0s	31ms/step	
1/1	0s	31ms/step	
1/1	0s	32ms/step	
1/1	0s	39ms/step	
1/1	0s	35ms/step	
1/1	0s	30ms/step	

1/1	0s	26ms/step	
1/1	0s	28ms/step	
1/1	0s	25ms/step	
1/1	0s	40ms/step	
1/1	0s	26ms/step	
1/1	0s	30ms/step	
1/1	0s	31ms/step	
1/1	0s	28ms/step	
1/1	0s	27ms/step	
1/1	0s	32ms/step	
1/1	0s	41ms/step	
1/1	0s	35ms/step	
1/1	0s	32ms/step	
1/1	0s	25ms/step	
1/1	0s	31ms/step	- loss: 0.0023
1/1	0s	32ms/step	- loss: 0.0021
1/1	0s	29ms/step	
1/1	0s	27ms/step	
1/1	0s	28ms/step	
1/1	0s	29ms/step	
1/1	0s	33ms/step	
1/1	0s	25ms/step	
1/1	0s	25ms/step	
1/1	0s	33ms/step	
1/1	0s	29ms/step	
1/1	0s	28ms/step	
1/1	0s	29ms/step	
1/1	0s	31ms/step	
1/1	0s	30ms/step	
1/1	0s	34ms/step	
1/1	0s	38ms/step	
1/1	0s	24ms/step	
1/1	0s	28ms/step	
1/1	0s	25ms/step	
1/1	0s	33ms/step	
1/1	0s	33ms/step	
1/1	0s	31ms/step	- loss: 0.0011
1/1	0s	33ms/step	- loss: 0.0012
1/1	0s	30ms/step	
1/1	0s	29ms/step	
1/1	0s	30ms/step	
1/1	0s	29ms/step	
1/1	0s	43ms/step	
1/1	0s	34ms/step	
1/1	0s	28ms/step	
1/1	0s	33ms/step	
1/1	0s	30ms/step	
1/1	0s	29ms/step	
1/1	0s	28ms/step	
1/1	0s	27ms/step	
1/1	0s	28ms/step	
1/1	0s	28ms/step	
1/1	0s	34ms/step	
1/1	0s	33ms/step	
1/1	0s	30ms/step	
1/1	0s	30ms/step	

```
1/1 ————— 0s 26ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 34ms/step - loss: 0.0037
1/1 ————— 0s 29ms/step - loss: 0.0036
1/1 ————— 0s 35ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 35ms/step - loss: 0.0025
1/1 ————— 0s 30ms/step - loss: 0.0024
Epoch: 025/149 | Loss: 0.0024 | Episodes: 115 | Win count: 1 | Win rate: 0.038 | time: 153.8 seconds
1/1 ————— 0s 30ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 44ms/step - loss: 0.0025
1/1 ————— 0s 37ms/step - loss: 0.0023
1/1 ————— 0s 36ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 25ms/step
```

1/1		0s	30ms/step	
1/1		0s	33ms/step	
1/1		0s	27ms/step	
1/1		0s	26ms/step	
1/1		0s	30ms/step	
1/1		0s	35ms/step	
1/1		0s	35ms/step	
1/1		0s	30ms/step	
1/1		0s	34ms/step	
1/1		0s	38ms/step	
1/1		0s	32ms/step	
1/1		0s	27ms/step	
1/1		0s	35ms/step	
1/1		0s	29ms/step	
1/1		0s	38ms/step	- loss: 0.0018
1/1		0s	35ms/step	- loss: 0.0018
1/1		0s	25ms/step	
1/1		0s	29ms/step	
1/1		0s	29ms/step	
1/1		0s	28ms/step	
1/1		0s	30ms/step	
1/1		0s	26ms/step	
1/1		0s	29ms/step	
1/1		0s	36ms/step	
1/1		0s	28ms/step	
1/1		0s	39ms/step	
1/1		0s	35ms/step	
1/1		0s	23ms/step	
1/1		0s	26ms/step	
1/1		0s	27ms/step	
1/1		0s	30ms/step	
1/1		0s	28ms/step	
1/1		0s	33ms/step	
1/1		0s	29ms/step	
1/1		0s	35ms/step	
1/1		0s	26ms/step	
1/1		0s	30ms/step	- loss: 0.0018
1/1		0s	40ms/step	- loss: 0.0016
1/1		0s	34ms/step	
1/1		0s	29ms/step	
1/1		0s	27ms/step	
1/1		0s	29ms/step	
1/1		0s	35ms/step	
1/1		0s	28ms/step	
1/1		0s	27ms/step	
1/1		0s	28ms/step	
1/1		0s	29ms/step	
1/1		0s	28ms/step	
1/1		0s	33ms/step	
1/1		0s	27ms/step	
1/1		0s	26ms/step	
1/1		0s	35ms/step	
1/1		0s	30ms/step	
1/1		0s	29ms/step	
1/1		0s	26ms/step	
1/1		0s	37ms/step	

```
1/1 ————— 0s 29ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 31ms/step - loss: 0.0021
1/1 ————— 0s 29ms/step - loss: 0.0023
1/1 ————— 0s 29ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 48ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 29ms/step - loss: 0.0014
1/1 ————— 0s 27ms/step - loss: 0.0016
1/1 ————— 0s 25ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 23ms/step
1/1 ————— 0s 23ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 36ms/step - loss: 0.0012
1/1 ————— 0s 26ms/step - loss: 0.0011
Epoch: 026/149 | Loss: 0.0011 | Episodes: 121 | Win count: 1 | Win rate: 0.037 | time: 162.4 seconds
1/1 ————— 0s 30ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 32ms/step
```

1/1	0s	24ms/step	
1/1	0s	31ms/step	
1/1	0s	27ms/step	
1/1	0s	30ms/step	
1/1	0s	30ms/step	
1/1	0s	26ms/step	
1/1	0s	23ms/step	
1/1	0s	25ms/step	
1/1	0s	27ms/step	
1/1	0s	29ms/step	
1/1	0s	24ms/step	
1/1	0s	34ms/step	
1/1	0s	33ms/step	
1/1	0s	28ms/step	
1/1	0s	30ms/step	- loss: 0.0012
1/1	0s	28ms/step	- loss: 0.0013
1/1	0s	31ms/step	
1/1	0s	28ms/step	
1/1	0s	34ms/step	
1/1	0s	27ms/step	
1/1	0s	31ms/step	
1/1	0s	40ms/step	
1/1	0s	33ms/step	
1/1	0s	30ms/step	
1/1	0s	28ms/step	
1/1	0s	24ms/step	
1/1	0s	23ms/step	
1/1	0s	30ms/step	
1/1	0s	26ms/step	
1/1	0s	23ms/step	
1/1	0s	34ms/step	
1/1	0s	23ms/step	
1/1	0s	30ms/step	
1/1	0s	29ms/step	
1/1	0s	26ms/step	
1/1	0s	28ms/step	
1/1	0s	40ms/step	- loss: 0.0022
1/1	0s	37ms/step	- loss: 0.0022
1/1	0s	33ms/step	
1/1	0s	31ms/step	
1/1	0s	26ms/step	
1/1	0s	29ms/step	
1/1	0s	27ms/step	
1/1	0s	25ms/step	
1/1	0s	29ms/step	
1/1	0s	31ms/step	
1/1	0s	30ms/step	
1/1	0s	25ms/step	
1/1	0s	27ms/step	
1/1	0s	25ms/step	
1/1	0s	26ms/step	
1/1	0s	25ms/step	
1/1	0s	30ms/step	
1/1	0s	30ms/step	
1/1	0s	27ms/step	
1/1	0s	33ms/step	

```
1/1 ██████████ 0s 42ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 35ms/step - loss: 0.0020
1/1 ██████████ 0s 41ms/step - loss: 0.0020
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 25ms/step
1/1 ██████████ 0s 27ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 43ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 27ms/step
1/1 ██████████ 0s 25ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 32ms/step - loss: 0.0032
1/1 ██████████ 0s 38ms/step - loss: 0.0027
1/1 ██████████ 0s 24ms/step
1/1 ██████████ 0s 27ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 26ms/step
1/1 ██████████ 0s 42ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 24ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 24ms/step
1/1 ██████████ 0s 25ms/step
1/1 ██████████ 0s 25ms/step
1/1 ██████████ 0s 31ms/step - loss: 0.0031
1/1 ██████████ 0s 32ms/step - loss: 0.0030
1/1 ██████████ 0s 26ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 27ms/step
1/1 ██████████ 0s 24ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 42ms/step
1/1 ██████████ 0s 24ms/step
```


1/1		0s	39ms/step	
1/1		0s	32ms/step	
1/1		0s	39ms/step	
1/1		0s	30ms/step	
1/1		0s	26ms/step	
1/1		0s	29ms/step	
1/1		0s	25ms/step	
1/1		0s	26ms/step	
1/1		0s	24ms/step	
1/1		0s	31ms/step	
1/1		0s	22ms/step	
1/1		0s	23ms/step	
1/1		0s	29ms/step	- loss: 0.0032
1/1		0s	30ms/step	- loss: 0.0030
1/1		0s	28ms/step	
1/1		0s	26ms/step	
1/1		0s	28ms/step	
1/1		0s	25ms/step	
1/1		0s	27ms/step	
1/1		0s	30ms/step	
1/1		0s	33ms/step	
1/1		0s	28ms/step	
1/1		0s	25ms/step	
1/1		0s	29ms/step	
1/1		0s	25ms/step	
1/1		0s	27ms/step	
1/1		0s	27ms/step	
1/1		0s	36ms/step	
1/1		0s	31ms/step	
1/1		0s	28ms/step	
1/1		0s	29ms/step	
1/1		0s	27ms/step	
1/1		0s	39ms/step	
1/1		0s	29ms/step	
1/1		0s	39ms/step	- loss: 0.0026
1/1		0s	35ms/step	- loss: 0.0023
1/1		0s	28ms/step	
1/1		0s	28ms/step	
1/1		0s	40ms/step	
1/1		0s	35ms/step	
1/1		0s	26ms/step	
1/1		0s	25ms/step	
1/1		0s	29ms/step	
1/1		0s	27ms/step	
1/1		0s	26ms/step	
1/1		0s	30ms/step	
1/1		0s	28ms/step	
1/1		0s	26ms/step	
1/1		0s	24ms/step	
1/1		0s	29ms/step	
1/1		0s	24ms/step	
1/1		0s	27ms/step	
1/1		0s	31ms/step	
1/1		0s	28ms/step	
1/1		0s	27ms/step	
1/1		0s	31ms/step	

```
1/1 ██████████ 0s 32ms/step - loss: 0.0024
1/1 ██████████ 0s 37ms/step - loss: 0.0028
Epoch: 027/149 | Loss: 0.0028 | Episodes: 129 | Win count: 1 | Win rate: 0.036 | time: 173.5 seconds
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 26ms/step
1/1 ██████████ 0s 24ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 27ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 27ms/step
1/1 ██████████ 0s 27ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 24ms/step
1/1 ██████████ 0s 29ms/step - loss: 0.0020
1/1 ██████████ 0s 32ms/step - loss: 0.0022
1/1 ██████████ 0s 25ms/step
1/1 ██████████ 0s 25ms/step
1/1 ██████████ 0s 26ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 24ms/step
1/1 ██████████ 0s 25ms/step
1/1 ██████████ 0s 27ms/step
1/1 ██████████ 0s 25ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 25ms/step
1/1 ██████████ 0s 24ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 25ms/step
1/1 ██████████ 0s 40ms/step
1/1 ██████████ 0s 41ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 25ms/step
1/1 ██████████ 0s 41ms/step
1/1 ██████████ 0s 48ms/step - loss: 0.0037
1/1 ██████████ 0s 36ms/step - loss: 0.0036
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 27ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 27ms/step
1/1 ██████████ 0s 26ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 26ms/step
1/1 ██████████ 0s 30ms/step
```

```
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 27ms/step
1/1 ██████████ 0s 26ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 30ms/step - loss: 0.0037
1/1 ██████████ 0s 30ms/step - loss: 0.0035
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 27ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 40ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 25ms/step
1/1 ██████████ 0s 25ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 26ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 27ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 26ms/step
1/1 ██████████ 0s 25ms/step
1/1 ██████████ 0s 33ms/step - loss: 0.0042
1/1 ██████████ 0s 39ms/step - loss: 0.0043
Epoch: 028/149 | Loss: 0.0043 | Episodes: 133 | Win count: 1 | Win rate: 0.034 | time: 179.3 seconds
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 27ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 23ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 24ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 24ms/step
1/1 ██████████ 0s 26ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 25ms/step
```

1/1	0s	24ms/step	
1/1	0s	30ms/step	
1/1	0s	34ms/step	- loss: 0.0054
1/1	0s	31ms/step	- loss: 0.0051
1/1	0s	31ms/step	
1/1	0s	29ms/step	
1/1	0s	34ms/step	
1/1	0s	27ms/step	
1/1	0s	27ms/step	
1/1	0s	24ms/step	
1/1	0s	35ms/step	
1/1	0s	28ms/step	
1/1	0s	36ms/step	
1/1	0s	30ms/step	
1/1	0s	31ms/step	
1/1	0s	29ms/step	
1/1	0s	25ms/step	
1/1	0s	34ms/step	
1/1	0s	23ms/step	
1/1	0s	28ms/step	
1/1	0s	31ms/step	
1/1	0s	28ms/step	
1/1	0s	28ms/step	
1/1	0s	41ms/step	
1/1	0s	40ms/step	- loss: 0.0059
1/1	0s	42ms/step	- loss: 0.0055
1/1	0s	25ms/step	
1/1	0s	28ms/step	
1/1	0s	28ms/step	
1/1	0s	29ms/step	
1/1	0s	23ms/step	
1/1	0s	35ms/step	
1/1	0s	35ms/step	
1/1	0s	29ms/step	
1/1	0s	31ms/step	
1/1	0s	27ms/step	
1/1	0s	29ms/step	
1/1	0s	26ms/step	
1/1	0s	33ms/step	
1/1	0s	28ms/step	
1/1	0s	25ms/step	
1/1	0s	38ms/step	
1/1	0s	29ms/step	
1/1	0s	27ms/step	
1/1	0s	26ms/step	
1/1	0s	26ms/step	
1/1	0s	36ms/step	- loss: 0.0034
1/1	0s	32ms/step	- loss: 0.0032
1/1	0s	31ms/step	
1/1	0s	25ms/step	
1/1	0s	26ms/step	
1/1	0s	25ms/step	
1/1	0s	35ms/step	
1/1	0s	36ms/step	
1/1	0s	39ms/step	
1/1	0s	29ms/step	

```
1/1 ————— 0s 30ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 33ms/step - loss: 0.0013
1/1 ————— 0s 30ms/step - loss: 0.0015
Epoch: 029/149 | Loss: 0.0015 | Episodes: 137 | Win count: 1 | Win rate: 0.033 | time: 184.9 seconds
1/1 ————— 0s 25ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 38ms/step - loss: 0.0022
1/1 ————— 0s 47ms/step - loss: 0.0021
1/1 ————— 0s 31ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 28ms/step
```

```
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 42ms/step - loss: 0.0032
1/1 ██████████ 0s 32ms/step - loss: 0.0035
Epoch: 030/149 | Loss: 0.0035 | Episodes: 139 | Win count: 2 | Win rate: 0.065 | time: 187.8 seconds
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 25ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 25ms/step
1/1 ██████████ 0s 25ms/step
1/1 ██████████ 0s 26ms/step
1/1 ██████████ 0s 25ms/step
1/1 ██████████ 0s 26ms/step
1/1 ██████████ 0s 25ms/step
1/1 ██████████ 0s 27ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 24ms/step
1/1 ██████████ 0s 27ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 37ms/step - loss: 0.0034
1/1 ██████████ 0s 28ms/step - loss: 0.0034
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 25ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 27ms/step
1/1 ██████████ 0s 24ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 27ms/step
1/1 ██████████ 0s 26ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 27ms/step
1/1 ██████████ 0s 36ms/step - loss: 0.0028
1/1 ██████████ 0s 29ms/step - loss: 0.0027
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 27ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 32ms/step
```

1/1		0s	28ms/step	
1/1		0s	30ms/step	
1/1		0s	28ms/step	
1/1		0s	26ms/step	
1/1		0s	28ms/step	
1/1		0s	27ms/step	
1/1		0s	33ms/step	
1/1		0s	27ms/step	
1/1		0s	33ms/step	
1/1		0s	28ms/step	
1/1		0s	33ms/step	
1/1		0s	29ms/step	
1/1		0s	32ms/step	
1/1		0s	30ms/step	
1/1		0s	37ms/step	- loss: 0.0034
1/1		0s	39ms/step	- loss: 0.0029
1/1		0s	29ms/step	
1/1		0s	29ms/step	
1/1		0s	27ms/step	
1/1		0s	27ms/step	
1/1		0s	28ms/step	
1/1		0s	29ms/step	
1/1		0s	28ms/step	
1/1		0s	26ms/step	
1/1		0s	35ms/step	
1/1		0s	29ms/step	
1/1		0s	26ms/step	
1/1		0s	27ms/step	
1/1		0s	30ms/step	
1/1		0s	25ms/step	
1/1		0s	27ms/step	
1/1		0s	28ms/step	
1/1		0s	43ms/step	
1/1		0s	29ms/step	
1/1		0s	28ms/step	
1/1		0s	26ms/step	
1/1		0s	36ms/step	- loss: 0.0025
1/1		0s	32ms/step	- loss: 0.0025
1/1		0s	27ms/step	
1/1		0s	30ms/step	
1/1		0s	28ms/step	
1/1		0s	25ms/step	
1/1		0s	26ms/step	
1/1		0s	31ms/step	
1/1		0s	34ms/step	
1/1		0s	28ms/step	
1/1		0s	32ms/step	
1/1		0s	29ms/step	
1/1		0s	32ms/step	
1/1		0s	28ms/step	
1/1		0s	31ms/step	
1/1		0s	30ms/step	
1/1		0s	33ms/step	
1/1		0s	25ms/step	
1/1		0s	24ms/step	
1/1		0s	26ms/step	

```
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 26ms/step
1/1 ██████████ 0s 30ms/step - loss: 0.0026
1/1 ██████████ 0s 43ms/step - loss: 0.0027
Epoch: 031/149 | Loss: 0.0027 | Episodes: 144 | Win count: 2 | Win rate: 0.062 | time: 194.8 seconds
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 27ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 26ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 26ms/step
1/1 ██████████ 0s 25ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 27ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 42ms/step - loss: 0.0036
1/1 ██████████ 0s 37ms/step - loss: 0.0035
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 25ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 42ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 27ms/step
1/1 ██████████ 0s 35ms/step - loss: 0.0023
1/1 ██████████ 0s 32ms/step - loss: 0.0024
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 29ms/step
```



```
1/1 26ms/step
1/1 31ms/step
1/1 30ms/step
1/1 29ms/step
1/1 27ms/step
1/1 29ms/step
1/1 34ms/step
1/1 30ms/step
1/1 26ms/step
1/1 27ms/step
1/1 30ms/step
1/1 27ms/step
1/1 23ms/step
1/1 28ms/step
1/1 38ms/step - loss: 0.0040
1/1 35ms/step - loss: 0.0039
Epoch: 032/149 | Loss: 0.0039 | Episodes: 147 | Win count: 2 | Win rate: 0.061 | time: 199.1 seconds
1/1 37ms/step
1/1 28ms/step
1/1 29ms/step
1/1 27ms/step
1/1 35ms/step
1/1 31ms/step
1/1 28ms/step
1/1 30ms/step
1/1 36ms/step
1/1 33ms/step
1/1 29ms/step
1/1 24ms/step
1/1 29ms/step
1/1 30ms/step
1/1 28ms/step
1/1 27ms/step
1/1 31ms/step
1/1 25ms/step
1/1 30ms/step
1/1 31ms/step
1/1 36ms/step - loss: 0.0054
1/1 28ms/step - loss: 0.0050
1/1 26ms/step
1/1 25ms/step
1/1 32ms/step
1/1 32ms/step
1/1 35ms/step
1/1 45ms/step
1/1 34ms/step
1/1 32ms/step
1/1 29ms/step
1/1 32ms/step
1/1 32ms/step
1/1 29ms/step
1/1 39ms/step
1/1 30ms/step
1/1 45ms/step
1/1 29ms/step
```

```
1/1 ————— 0s 32ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 30ms/step - loss: 0.0045
1/1 ————— 0s 43ms/step - loss: 0.0039
1/1 ————— 0s 33ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 42ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 29ms/step - loss: 0.0028
1/1 ————— 0s 35ms/step - loss: 0.0028
Epoch: 033/149 | Loss: 0.0028 | Episodes: 150 | Win count: 2 | Win rate: 0.059 | time: 203.7 seconds
1/1 ————— 0s 31ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 43ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 36ms/step - loss: 0.0028
1/1 ————— 0s 35ms/step - loss: 0.0028
Epoch: 034/149 | Loss: 0.0028 | Episodes: 151 | Win count: 3 | Win rate: 0.086 | time: 205.2 seconds
1/1 ————— 0s 39ms/step
1/1 ————— 0s 31ms/step
```

1/1		0s	27ms/step	
1/1		0s	32ms/step	
1/1		0s	31ms/step	
1/1		0s	38ms/step	
1/1		0s	31ms/step	
1/1		0s	32ms/step	
1/1		0s	29ms/step	
1/1		0s	25ms/step	
1/1		0s	33ms/step	
1/1		0s	28ms/step	
1/1		0s	24ms/step	
1/1		0s	28ms/step	
1/1		0s	27ms/step	
1/1		0s	28ms/step	
1/1		0s	29ms/step	
1/1		0s	37ms/step	
1/1		0s	26ms/step	
1/1		0s	32ms/step	
1/1		0s	45ms/step	loss: 0.0016
1/1		0s	37ms/step	loss: 0.0016
1/1		0s	41ms/step	
1/1		0s	38ms/step	
1/1		0s	30ms/step	
1/1		0s	35ms/step	
1/1		0s	33ms/step	
1/1		0s	27ms/step	
1/1		0s	31ms/step	
1/1		0s	29ms/step	
1/1		0s	30ms/step	
1/1		0s	25ms/step	
1/1		0s	44ms/step	
1/1		0s	33ms/step	
1/1		0s	36ms/step	
1/1		0s	30ms/step	
1/1		0s	34ms/step	
1/1		0s	27ms/step	
1/1		0s	24ms/step	
1/1		0s	37ms/step	
1/1		0s	30ms/step	
1/1		0s	31ms/step	
1/1		0s	37ms/step	loss: 0.0042
1/1		0s	47ms/step	loss: 0.0035
1/1		0s	32ms/step	
1/1		0s	34ms/step	
1/1		0s	30ms/step	
1/1		0s	30ms/step	
1/1		0s	30ms/step	
1/1		0s	29ms/step	
1/1		0s	30ms/step	
1/1		0s	40ms/step	
1/1		0s	33ms/step	
1/1		0s	27ms/step	
1/1		0s	27ms/step	
1/1		0s	29ms/step	
1/1		0s	29ms/step	
1/1		0s	33ms/step	

```
1/1 ————— 0s 38ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 31ms/step - loss: 0.0030
1/1 ————— 0s 30ms/step - loss: 0.0029
1/1 ————— 0s 25ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 29ms/step - loss: 0.0027
1/1 ————— 0s 31ms/step - loss: 0.0030
1/1 ————— 0s 38ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 36ms/step - loss: 0.0025
1/1 ————— 0s 30ms/step - loss: 0.0029
Epoch: 035/149 | Loss: 0.0029 | Episodes: 156 | Win count: 3 | Win rate: 0.083 | time: 212.6 seconds
1/1 ————— 0s 36ms/step
1/1 ————— 0s 31ms/step
```

1/1	=====	0s	43ms/step	
1/1	=====	0s	36ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	25ms/step	
1/1	=====	0s	27ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	37ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	30ms/step	
1/1	=====	0s	30ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	29ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	35ms/step	- loss: 0.0046
1/1	=====	0s	35ms/step	- loss: 0.0047
1/1	=====	0s	31ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	26ms/step	
1/1	=====	0s	26ms/step	
1/1	=====	0s	27ms/step	
1/1	=====	0s	27ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	36ms/step	
1/1	=====	0s	25ms/step	
1/1	=====	0s	28ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	26ms/step	
1/1	=====	0s	27ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	28ms/step	
1/1	=====	0s	28ms/step	
1/1	=====	0s	49ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	26ms/step	
1/1	=====	0s	28ms/step	
1/1	=====	0s	38ms/step	- loss: 0.0040
1/1	=====	0s	35ms/step	- loss: 0.0035
1/1	=====	0s	29ms/step	
1/1	=====	0s	30ms/step	
1/1	=====	0s	35ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	30ms/step	
1/1	=====	0s	27ms/step	
1/1	=====	0s	38ms/step	
1/1	=====	0s	29ms/step	
1/1	=====	0s	30ms/step	
1/1	=====	0s	27ms/step	
1/1	=====	0s	28ms/step	
1/1	=====	0s	40ms/step	
1/1	=====	0s	32ms/step	

```
1/1 ————— 0s 25ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 36ms/step - loss: 0.0022
1/1 ————— 0s 31ms/step - loss: 0.0022
1/1 ————— 0s 31ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 31ms/step - loss: 0.0023
1/1 ————— 0s 33ms/step - loss: 0.0024
Epoch: 036/149 | Loss: 0.0024 | Episodes: 160 | Win count: 3 | Win rate: 0.081 | time: 218.5 seconds
1/1 ————— 0s 30ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 33ms/step - loss: 0.0051
1/1 ————— 0s 30ms/step - loss: 0.0050
1/1 ————— 0s 31ms/step
1/1 ————— 0s 40ms/step
```

1/1		0s	31ms/step	
1/1		0s	33ms/step	
1/1		0s	30ms/step	
1/1		0s	27ms/step	
1/1		0s	27ms/step	
1/1		0s	32ms/step	
1/1		0s	30ms/step	
1/1		0s	28ms/step	
1/1		0s	27ms/step	
1/1		0s	34ms/step	
1/1		0s	29ms/step	
1/1		0s	29ms/step	
1/1		0s	37ms/step	
1/1		0s	30ms/step	
1/1		0s	29ms/step	
1/1		0s	26ms/step	
1/1		0s	34ms/step	
1/1		0s	47ms/step	
1/1		0s	37ms/step	- loss: 0.0030
1/1		0s	32ms/step	- loss: 0.0028
1/1		0s	33ms/step	
1/1		0s	41ms/step	
1/1		0s	31ms/step	
1/1		0s	31ms/step	
1/1		0s	27ms/step	
1/1		0s	31ms/step	
1/1		0s	23ms/step	
1/1		0s	26ms/step	
1/1		0s	30ms/step	
1/1		0s	34ms/step	
1/1		0s	30ms/step	
1/1		0s	41ms/step	
1/1		0s	29ms/step	
1/1		0s	43ms/step	
1/1		0s	30ms/step	
1/1		0s	30ms/step	
1/1		0s	26ms/step	
1/1		0s	30ms/step	
1/1		0s	24ms/step	
1/1		0s	26ms/step	
1/1		0s	30ms/step	- loss: 0.0044
1/1		0s	33ms/step	- loss: 0.0042
1/1		0s	32ms/step	
1/1		0s	29ms/step	
1/1		0s	31ms/step	
1/1		0s	24ms/step	
1/1		0s	31ms/step	
1/1		0s	26ms/step	
1/1		0s	30ms/step	
1/1		0s	28ms/step	
1/1		0s	28ms/step	
1/1		0s	28ms/step	
1/1		0s	35ms/step	
1/1		0s	30ms/step	
1/1		0s	29ms/step	
1/1		0s	25ms/step	

```
1/1 ————— 0s 29ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 31ms/step - loss: 0.0024
1/1 ————— 0s 29ms/step - loss: 0.0024
1/1 ————— 0s 28ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 46ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 42ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 33ms/step - loss: 0.0024
1/1 ————— 0s 36ms/step - loss: 0.0025
1/1 ————— 0s 29ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 37ms/step - loss: 0.0036
1/1 ————— 0s 31ms/step - loss: 0.0030
Epoch: 037/149 | Loss: 0.0030 | Episodes: 166 | Win count: 3 | Win rate: 0.079 | time: 227.4 seconds
1/1 ————— 0s 29ms/step
1/1 ————— 0s 26ms/step
```


1/1	0s	34ms/step	
1/1	0s	25ms/step	
1/1	0s	41ms/step	
1/1	0s	32ms/step	
1/1	0s	29ms/step	
1/1	0s	37ms/step	
1/1	0s	25ms/step	
1/1	0s	24ms/step	
1/1	0s	28ms/step	
1/1	0s	28ms/step	
1/1	0s	28ms/step	
1/1	0s	27ms/step	
1/1	0s	26ms/step	
1/1	0s	33ms/step	
1/1	0s	37ms/step	
1/1	0s	37ms/step	
1/1	0s	30ms/step	
1/1	0s	30ms/step	
1/1	0s	35ms/step	loss: 0.0366
1/1	0s	35ms/step	loss: 0.0345
1/1	0s	24ms/step	
1/1	0s	28ms/step	
1/1	0s	33ms/step	
1/1	0s	23ms/step	
1/1	0s	27ms/step	
1/1	0s	28ms/step	
1/1	0s	26ms/step	
1/1	0s	47ms/step	
1/1	0s	30ms/step	
1/1	0s	26ms/step	
1/1	0s	27ms/step	
1/1	0s	29ms/step	
1/1	0s	24ms/step	
1/1	0s	33ms/step	
1/1	0s	29ms/step	
1/1	0s	29ms/step	
1/1	0s	30ms/step	
1/1	0s	30ms/step	
1/1	0s	24ms/step	
1/1	0s	24ms/step	
1/1	0s	34ms/step	loss: 0.0045
1/1	0s	30ms/step	loss: 0.0046
1/1	0s	25ms/step	
1/1	0s	26ms/step	
1/1	0s	28ms/step	
1/1	0s	26ms/step	
1/1	0s	38ms/step	
1/1	0s	33ms/step	
1/1	0s	29ms/step	
1/1	0s	26ms/step	
1/1	0s	25ms/step	
1/1	0s	24ms/step	
1/1	0s	36ms/step	
1/1	0s	33ms/step	
1/1	0s	28ms/step	
1/1	0s	44ms/step	

1/1		0s	27ms/step	
1/1		0s	31ms/step	
1/1		0s	29ms/step	
1/1		0s	32ms/step	
1/1		0s	29ms/step	
1/1		0s	24ms/step	
1/1		0s	33ms/step	- loss: 0.0040
1/1		0s	32ms/step	- loss: 0.0037
1/1		0s	30ms/step	
1/1		0s	29ms/step	
1/1		0s	27ms/step	
1/1		0s	28ms/step	
1/1		0s	35ms/step	
1/1		0s	35ms/step	
1/1		0s	35ms/step	
1/1		0s	30ms/step	
1/1		0s	34ms/step	
1/1		0s	27ms/step	
1/1		0s	28ms/step	
1/1		0s	31ms/step	
1/1		0s	28ms/step	
1/1		0s	33ms/step	
1/1		0s	27ms/step	
1/1		0s	27ms/step	
1/1		0s	27ms/step	
1/1		0s	29ms/step	
1/1		0s	29ms/step	
1/1		0s	28ms/step	
1/1		0s	30ms/step	- loss: 0.0036
1/1		0s	35ms/step	- loss: 0.0039
1/1		0s	30ms/step	
1/1		0s	30ms/step	
1/1		0s	35ms/step	
1/1		0s	55ms/step	
1/1		0s	31ms/step	
1/1		0s	27ms/step	
1/1		0s	30ms/step	
1/1		0s	36ms/step	
1/1		0s	32ms/step	
1/1		0s	30ms/step	
1/1		0s	27ms/step	
1/1		0s	35ms/step	
1/1		0s	38ms/step	
1/1		0s	27ms/step	
1/1		0s	30ms/step	
1/1		0s	24ms/step	
1/1		0s	29ms/step	
1/1		0s	34ms/step	
1/1		0s	27ms/step	
1/1		0s	29ms/step	
1/1		0s	43ms/step	- loss: 0.0027
1/1		0s	44ms/step	- loss: 0.0029
1/1		0s	30ms/step	
1/1		0s	32ms/step	
1/1		0s	28ms/step	
1/1		0s	31ms/step	

```
1/1 ————— 0s 34ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 35ms/step - loss: 0.0017
1/1 ————— 0s 37ms/step - loss: 0.0018
1/1 ————— 0s 28ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 46ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 47ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 38ms/step - loss: 0.0053
1/1 ————— 0s 36ms/step - loss: 0.0054
Epoch: 038/149 | Loss: 0.0054 | Episodes: 173 | Win count: 3 | Win rate: 0.077 | time: 237.6 seconds
1/1 ————— 0s 27ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 34ms/step
```

```
1/1 ————— 0s 29ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 32ms/step - loss: 0.0026
1/1 ————— 0s 30ms/step - loss: 0.0027
1/1 ————— 0s 30ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 23ms/step
1/1 ————— 0s 22ms/step
1/1 ————— 0s 48ms/step
1/1 ————— 0s 33ms/step - loss: 0.0059
1/1 ————— 0s 43ms/step - loss: 0.0056
1/1 ————— 0s 31ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 50ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 36ms/step - loss: 0.0039
1/1 ————— 0s 37ms/step - loss: 0.0036
Epoch: 039/149 | Loss: 0.0036 | Episodes: 176 | Win count: 3 | Win rate: 0.075 | time: 242.0 seconds
1/1 ————— 0s 37ms/step
1/1 ————— 0s 29ms/step
```

1/1	0s	26ms/step	
1/1	0s	24ms/step	
1/1	0s	42ms/step	
1/1	0s	27ms/step	
1/1	0s	30ms/step	
1/1	0s	33ms/step	
1/1	0s	28ms/step	
1/1	0s	26ms/step	
1/1	0s	28ms/step	
1/1	0s	34ms/step	
1/1	0s	32ms/step	
1/1	0s	30ms/step	
1/1	0s	29ms/step	
1/1	0s	27ms/step	
1/1	0s	27ms/step	
1/1	0s	25ms/step	
1/1	0s	36ms/step	
1/1	0s	33ms/step	
1/1	0s	34ms/step	loss: 0.0283
1/1	0s	39ms/step	loss: 0.0280
1/1	0s	30ms/step	
1/1	0s	29ms/step	
1/1	0s	33ms/step	
1/1	0s	32ms/step	
1/1	0s	25ms/step	
1/1	0s	28ms/step	
1/1	0s	34ms/step	
1/1	0s	31ms/step	
1/1	0s	32ms/step	
1/1	0s	31ms/step	
1/1	0s	25ms/step	
1/1	0s	27ms/step	
1/1	0s	44ms/step	
1/1	0s	27ms/step	
1/1	0s	29ms/step	
1/1	0s	29ms/step	
1/1	0s	31ms/step	
1/1	0s	27ms/step	
1/1	0s	28ms/step	
1/1	0s	28ms/step	
1/1	0s	29ms/step	loss: 0.0037
1/1	0s	27ms/step	loss: 0.0037
1/1	0s	28ms/step	
1/1	0s	25ms/step	
1/1	0s	25ms/step	
1/1	0s	27ms/step	
1/1	0s	34ms/step	
1/1	0s	35ms/step	
1/1	0s	41ms/step	
1/1	0s	28ms/step	
1/1	0s	32ms/step	
1/1	0s	27ms/step	
1/1	0s	25ms/step	
1/1	0s	28ms/step	
1/1	0s	28ms/step	
1/1	0s	35ms/step	

1/1		0s	28ms/step	
1/1		0s	30ms/step	
1/1		0s	31ms/step	
1/1		0s	34ms/step	
1/1		0s	34ms/step	
1/1		0s	27ms/step	
1/1		0s	32ms/step	- loss: 0.0030
1/1		0s	34ms/step	- loss: 0.0029
1/1		0s	30ms/step	
1/1		0s	36ms/step	
1/1		0s	31ms/step	
1/1		0s	32ms/step	
1/1		0s	26ms/step	
1/1		0s	28ms/step	
1/1		0s	34ms/step	
1/1		0s	29ms/step	
1/1		0s	31ms/step	
1/1		0s	29ms/step	
1/1		0s	27ms/step	
1/1		0s	26ms/step	
1/1		0s	28ms/step	
1/1		0s	26ms/step	
1/1		0s	28ms/step	
1/1		0s	32ms/step	
1/1		0s	38ms/step	
1/1		0s	37ms/step	
1/1		0s	34ms/step	
1/1		0s	37ms/step	
1/1		0s	36ms/step	- loss: 0.0041
1/1		0s	29ms/step	- loss: 0.0039
1/1		0s	26ms/step	
1/1		0s	30ms/step	
1/1		0s	30ms/step	
1/1		0s	26ms/step	
1/1		0s	29ms/step	
1/1		0s	31ms/step	
1/1		0s	32ms/step	
1/1		0s	27ms/step	
1/1		0s	31ms/step	
1/1		0s	31ms/step	
1/1		0s	33ms/step	
1/1		0s	37ms/step	
1/1		0s	37ms/step	
1/1		0s	29ms/step	
1/1		0s	28ms/step	
1/1		0s	33ms/step	
1/1		0s	29ms/step	
1/1		0s	28ms/step	
1/1		0s	30ms/step	
1/1		0s	28ms/step	
1/1		0s	32ms/step	- loss: 0.0038
1/1		0s	29ms/step	- loss: 0.0034
1/1		0s	27ms/step	
1/1		0s	34ms/step	
1/1		0s	29ms/step	
1/1		0s	28ms/step	

1/1		0s	28ms/step	
1/1		0s	35ms/step	
1/1		0s	24ms/step	
1/1		0s	26ms/step	
1/1		0s	35ms/step	
1/1		0s	40ms/step	
1/1		0s	31ms/step	
1/1		0s	37ms/step	
1/1		0s	33ms/step	
1/1		0s	30ms/step	
1/1		0s	31ms/step	
1/1		0s	33ms/step	
1/1		0s	27ms/step	
1/1		0s	30ms/step	
1/1		0s	28ms/step	
1/1		0s	30ms/step	
1/1		0s	32ms/step	- loss: 0.0030
1/1		0s	33ms/step	- loss: 0.0026
1/1		0s	31ms/step	
1/1		0s	31ms/step	
1/1		0s	35ms/step	
1/1		0s	26ms/step	
1/1		0s	29ms/step	
1/1		0s	35ms/step	
1/1		0s	30ms/step	
1/1		0s	34ms/step	
1/1		0s	45ms/step	
1/1		0s	31ms/step	
1/1		0s	36ms/step	
1/1		0s	30ms/step	
1/1		0s	36ms/step	
1/1		0s	24ms/step	
1/1		0s	26ms/step	
1/1		0s	25ms/step	
1/1		0s	27ms/step	
1/1		0s	31ms/step	
1/1		0s	30ms/step	
1/1		0s	28ms/step	
1/1		0s	33ms/step	- loss: 0.0029
1/1		0s	32ms/step	- loss: 0.0028
1/1		0s	29ms/step	
1/1		0s	28ms/step	
1/1		0s	32ms/step	
1/1		0s	37ms/step	
1/1		0s	41ms/step	
1/1		0s	40ms/step	
1/1		0s	30ms/step	
1/1		0s	27ms/step	
1/1		0s	24ms/step	
1/1		0s	31ms/step	
1/1		0s	31ms/step	
1/1		0s	31ms/step	
1/1		0s	26ms/step	
1/1		0s	27ms/step	
1/1		0s	25ms/step	
1/1		0s	30ms/step	

```
1/1 ————— 0s 30ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 44ms/step - loss: 0.0028
1/1 ————— 0s 39ms/step - loss: 0.0025
Epoch: 040/149 | Loss: 0.0025 | Episodes: 184 | Win count: 3 | Win rate: 0.073 | time: 253.6 seconds
1/1 ————— 0s 32ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 45ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 28ms/step - loss: 0.0027
1/1 ————— 0s 31ms/step - loss: 0.0026
1/1 ————— 0s 25ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 44ms/step - loss: 0.0020
1/1 ————— 0s 31ms/step - loss: 0.0020
1/1 ————— 0s 30ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 45ms/step
1/1 ————— 0s 37ms/step
```



```
1/1 ————— 0s 32ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 43ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 36ms/step - loss: 0.0030
1/1 ————— 0s 32ms/step - loss: 0.0031
Epoch: 041/149 | Loss: 0.0031 | Episodes: 187 | Win count: 3 | Win rate: 0.071 | time: 258.0 seconds
1/1 ————— 0s 25ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 23ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 36ms/step - loss: 0.0034
1/1 ————— 0s 30ms/step - loss: 0.0036
1/1 ————— 0s 36ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 26ms/step
```

```
1/1 ————— 0s 27ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 23ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 40ms/step - loss: 0.0025
1/1 ————— 0s 30ms/step - loss: 0.0026
1/1 ————— 0s 27ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 33ms/step - loss: 0.0021
1/1 ————— 0s 35ms/step - loss: 0.0021
1/1 ————— 0s 25ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 36ms/step - loss: 0.0022
1/1 ————— 0s 32ms/step - loss: 0.0022
Epoch: 042/149 | Loss: 0.0022 | Episodes: 191 | Win count: 3 | Win rate: 0.070 | time: 263.7 seconds
1/1 ————— 0s 27ms/step
1/1 ————— 0s 26ms/step
```

1/1		0s	28ms/step	
1/1		0s	24ms/step	
1/1		0s	31ms/step	
1/1		0s	26ms/step	
1/1		0s	27ms/step	
1/1		0s	25ms/step	
1/1		0s	39ms/step	
1/1		0s	41ms/step	
1/1		0s	33ms/step	
1/1		0s	30ms/step	
1/1		0s	28ms/step	
1/1		0s	27ms/step	
1/1		0s	25ms/step	
1/1		0s	35ms/step	
1/1		0s	29ms/step	
1/1		0s	26ms/step	
1/1		0s	27ms/step	
1/1		0s	26ms/step	
1/1		0s	32ms/step	- loss: 0.0013
1/1		0s	34ms/step	- loss: 0.0013
1/1		0s	26ms/step	
1/1		0s	28ms/step	
1/1		0s	25ms/step	
1/1		0s	35ms/step	
1/1		0s	33ms/step	
1/1		0s	28ms/step	
1/1		0s	27ms/step	
1/1		0s	33ms/step	
1/1		0s	26ms/step	
1/1		0s	32ms/step	
1/1		0s	40ms/step	
1/1		0s	27ms/step	
1/1		0s	29ms/step	
1/1		0s	30ms/step	
1/1		0s	30ms/step	
1/1		0s	27ms/step	
1/1		0s	29ms/step	
1/1		0s	27ms/step	
1/1		0s	33ms/step	
1/1		0s	30ms/step	
1/1		0s	30ms/step	- loss: 0.0022
1/1		0s	30ms/step	- loss: 0.0022
1/1		0s	36ms/step	
1/1		0s	32ms/step	
1/1		0s	29ms/step	
1/1		0s	28ms/step	
1/1		0s	30ms/step	
1/1		0s	32ms/step	
1/1		0s	34ms/step	
1/1		0s	36ms/step	
1/1		0s	28ms/step	
1/1		0s	34ms/step	
1/1		0s	31ms/step	
1/1		0s	32ms/step	
1/1		0s	44ms/step	
1/1		0s	32ms/step	

```
1/1 ————— 0s 31ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 29ms/step - loss: 0.0018
1/1 ————— 0s 34ms/step - loss: 0.0017
1/1 ————— 0s 34ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 31ms/step - loss: 0.0038
1/1 ————— 0s 32ms/step - loss: 0.0036
Epoch: 043/149 | Loss: 0.0036 | Episodes: 195 | Win count: 3 | Win rate: 0.068 | time: 269.7 seconds
1/1 ————— 0s 28ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 44ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 26ms/step - loss: 0.0346
1/1 ————— 0s 35ms/step - loss: 0.0325
1/1 ————— 0s 34ms/step
1/1 ————— 0s 35ms/step
```

1/1		0s	27ms/step	
1/1		0s	28ms/step	
1/1		0s	29ms/step	
1/1		0s	29ms/step	
1/1		0s	31ms/step	
1/1		0s	24ms/step	
1/1		0s	29ms/step	
1/1		0s	27ms/step	
1/1		0s	26ms/step	
1/1		0s	29ms/step	
1/1		0s	29ms/step	
1/1		0s	27ms/step	
1/1		0s	26ms/step	
1/1		0s	33ms/step	
1/1		0s	29ms/step	
1/1		0s	28ms/step	
1/1		0s	28ms/step	
1/1		0s	30ms/step	
1/1		0s	30ms/step	- loss: 0.0034
1/1		0s	29ms/step	- loss: 0.0039
1/1		0s	29ms/step	
1/1		0s	32ms/step	
1/1		0s	30ms/step	
1/1		0s	28ms/step	
1/1		0s	30ms/step	
1/1		0s	28ms/step	
1/1		0s	29ms/step	
1/1		0s	25ms/step	
1/1		0s	27ms/step	
1/1		0s	29ms/step	
1/1		0s	33ms/step	
1/1		0s	31ms/step	
1/1		0s	26ms/step	
1/1		0s	30ms/step	
1/1		0s	27ms/step	
1/1		0s	30ms/step	
1/1		0s	29ms/step	
1/1		0s	32ms/step	
1/1		0s	27ms/step	
1/1		0s	43ms/step	
1/1		0s	51ms/step	- loss: 0.0027
1/1		0s	35ms/step	- loss: 0.0030
1/1		0s	25ms/step	
1/1		0s	29ms/step	
1/1		0s	23ms/step	
1/1		0s	42ms/step	
1/1		0s	29ms/step	
1/1		0s	25ms/step	
1/1		0s	27ms/step	
1/1		0s	30ms/step	
1/1		0s	25ms/step	
1/1		0s	27ms/step	
1/1		0s	27ms/step	
1/1		0s	29ms/step	
1/1		0s	28ms/step	
1/1		0s	28ms/step	

1/1	0s	27ms/step	
1/1	0s	33ms/step	
1/1	0s	33ms/step	
1/1	0s	36ms/step	
1/1	0s	28ms/step	
1/1	0s	24ms/step	
1/1	0s	31ms/step	- loss: 0.0050
1/1	0s	31ms/step	- loss: 0.0046
1/1	0s	32ms/step	
1/1	0s	26ms/step	
1/1	0s	26ms/step	
1/1	0s	27ms/step	
1/1	0s	30ms/step	
1/1	0s	28ms/step	
1/1	0s	27ms/step	
1/1	0s	32ms/step	
1/1	0s	39ms/step	
1/1	0s	26ms/step	
1/1	0s	30ms/step	
1/1	0s	52ms/step	
1/1	0s	37ms/step	
1/1	0s	28ms/step	
1/1	0s	29ms/step	
1/1	0s	34ms/step	
1/1	0s	29ms/step	
1/1	0s	26ms/step	
1/1	0s	26ms/step	
1/1	0s	25ms/step	
1/1	0s	31ms/step	- loss: 0.0060
1/1	0s	30ms/step	- loss: 0.0051
1/1	0s	29ms/step	
1/1	0s	27ms/step	
1/1	0s	32ms/step	
1/1	0s	28ms/step	
1/1	0s	35ms/step	
1/1	0s	46ms/step	
1/1	0s	38ms/step	
1/1	0s	32ms/step	
1/1	0s	35ms/step	
1/1	0s	25ms/step	
1/1	0s	30ms/step	
1/1	0s	31ms/step	
1/1	0s	25ms/step	
1/1	0s	29ms/step	
1/1	0s	27ms/step	
1/1	0s	29ms/step	
1/1	0s	25ms/step	
1/1	0s	33ms/step	
1/1	0s	27ms/step	
1/1	0s	32ms/step	
1/1	0s	34ms/step	- loss: 0.0015
1/1	0s	28ms/step	- loss: 0.0017
1/1	0s	29ms/step	
1/1	0s	27ms/step	
1/1	0s	42ms/step	
1/1	0s	28ms/step	

```
1/1 ————— 0s 47ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 35ms/step - loss: 0.0031
1/1 ————— 0s 28ms/step - loss: 0.0028
Epoch: 044/149 | Loss: 0.0028 | Episodes: 202 | Win count: 3 | Win rate: 0.067 | time: 279.8 seconds
1/1 ————— 0s 36ms/step
1/1 ————— 0s 43ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 42ms/step - loss: 0.0025
1/1 ————— 0s 31ms/step - loss: 0.0029
1/1 ————— 0s 29ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 42ms/step
1/1 ————— 0s 23ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 29ms/step
```

```
1/1 ————— 0s 29ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 33ms/step - loss: 0.0028
1/1 ————— 0s 36ms/step - loss: 0.0027
1/1 ————— 0s 23ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 27ms/step - loss: 0.0031
1/1 ————— 0s 26ms/step - loss: 0.0033
1/1 ————— 0s 30ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 30ms/step - loss: 0.0393
1/1 ————— 0s 32ms/step - loss: 0.0381
1/1 ————— 0s 24ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 27ms/step
```


1/1		0s	29ms/step	
1/1		0s	34ms/step	
1/1		0s	37ms/step	
1/1		0s	26ms/step	
1/1		0s	30ms/step	
1/1		0s	27ms/step	
1/1		0s	36ms/step	
1/1		0s	34ms/step	
1/1		0s	38ms/step	
1/1		0s	29ms/step	
1/1		0s	34ms/step	
1/1		0s	27ms/step	
1/1		0s	25ms/step	
1/1		0s	27ms/step	
1/1		0s	28ms/step	
1/1		0s	33ms/step	
1/1		0s	32ms/step	- loss: 0.0029
1/1		0s	34ms/step	- loss: 0.0027
1/1		0s	34ms/step	
1/1		0s	33ms/step	
1/1		0s	29ms/step	
1/1		0s	30ms/step	
1/1		0s	28ms/step	
1/1		0s	26ms/step	
1/1		0s	27ms/step	
1/1		0s	28ms/step	
1/1		0s	34ms/step	
1/1		0s	32ms/step	
1/1		0s	31ms/step	
1/1		0s	26ms/step	
1/1		0s	30ms/step	
1/1		0s	29ms/step	
1/1		0s	30ms/step	
1/1		0s	36ms/step	
1/1		0s	25ms/step	
1/1		0s	31ms/step	
1/1		0s	24ms/step	
1/1		0s	28ms/step	
1/1		0s	36ms/step	- loss: 0.0030
1/1		0s	27ms/step	- loss: 0.0029
1/1		0s	28ms/step	
1/1		0s	29ms/step	
1/1		0s	30ms/step	
1/1		0s	30ms/step	
1/1		0s	30ms/step	
1/1		0s	25ms/step	
1/1		0s	31ms/step	
1/1		0s	41ms/step	
1/1		0s	26ms/step	
1/1		0s	28ms/step	
1/1		0s	30ms/step	
1/1		0s	30ms/step	
1/1		0s	42ms/step	
1/1		0s	28ms/step	
1/1		0s	25ms/step	
1/1		0s	28ms/step	

```
1/1 36ms/step
1/1 36ms/step
1/1 28ms/step
1/1 36ms/step
1/1 31ms/step - loss: 0.0025
1/1 37ms/step - loss: 0.0025
Epoch: 045/149 | Loss: 0.0025 | Episodes: 209 | Win count: 3 | Win rate: 0.065 | time: 289.9 seconds
1/1 32ms/step
1/1 29ms/step
1/1 26ms/step
1/1 26ms/step
1/1 24ms/step
1/1 43ms/step
1/1 32ms/step
1/1 29ms/step
1/1 24ms/step
1/1 31ms/step
1/1 33ms/step
1/1 30ms/step
1/1 32ms/step
1/1 29ms/step
1/1 30ms/step
1/1 31ms/step
1/1 29ms/step
1/1 26ms/step
1/1 26ms/step
1/1 29ms/step
1/1 30ms/step - loss: 0.0027
1/1 32ms/step - loss: 0.0025
1/1 29ms/step
1/1 29ms/step
1/1 26ms/step
1/1 32ms/step
1/1 32ms/step
1/1 32ms/step
1/1 26ms/step
1/1 27ms/step
1/1 37ms/step
1/1 32ms/step
1/1 28ms/step
1/1 50ms/step
1/1 29ms/step
1/1 38ms/step
1/1 49ms/step
1/1 29ms/step
1/1 31ms/step
1/1 30ms/step
1/1 32ms/step
1/1 28ms/step
1/1 28ms/step - loss: 0.0034
1/1 31ms/step - loss: 0.0035
1/1 35ms/step
1/1 33ms/step
1/1 30ms/step
1/1 28ms/step
```

1/1	<div></div>	0s	42ms/step	
1/1	<div></div>	0s	32ms/step	
1/1	<div></div>	0s	35ms/step	
1/1	<div></div>	0s	31ms/step	
1/1	<div></div>	0s	27ms/step	
1/1	<div></div>	0s	25ms/step	
1/1	<div></div>	0s	26ms/step	
1/1	<div></div>	0s	31ms/step	
1/1	<div></div>	0s	31ms/step	
1/1	<div></div>	0s	28ms/step	
1/1	<div></div>	0s	25ms/step	
1/1	<div></div>	0s	28ms/step	
1/1	<div></div>	0s	36ms/step	
1/1	<div></div>	0s	28ms/step	
1/1	<div></div>	0s	27ms/step	
1/1	<div></div>	0s	28ms/step	
1/1	<div></div>	0s	39ms/step	- loss: 0.0029
1/1	<div></div>	0s	39ms/step	- loss: 0.0031
1/1	<div></div>	0s	35ms/step	
1/1	<div></div>	0s	29ms/step	
1/1	<div></div>	0s	30ms/step	
1/1	<div></div>	0s	27ms/step	
1/1	<div></div>	0s	31ms/step	
1/1	<div></div>	0s	28ms/step	
1/1	<div></div>	0s	31ms/step	
1/1	<div></div>	0s	33ms/step	
1/1	<div></div>	0s	31ms/step	
1/1	<div></div>	0s	28ms/step	
1/1	<div></div>	0s	27ms/step	
1/1	<div></div>	0s	31ms/step	
1/1	<div></div>	0s	26ms/step	
1/1	<div></div>	0s	28ms/step	
1/1	<div></div>	0s	31ms/step	
1/1	<div></div>	0s	33ms/step	
1/1	<div></div>	0s	30ms/step	
1/1	<div></div>	0s	32ms/step	
1/1	<div></div>	0s	32ms/step	
1/1	<div></div>	0s	32ms/step	
1/1	<div></div>	0s	28ms/step	- loss: 0.0031
1/1	<div></div>	0s	34ms/step	- loss: 0.0028
1/1	<div></div>	0s	24ms/step	
1/1	<div></div>	0s	29ms/step	
1/1	<div></div>	0s	27ms/step	
1/1	<div></div>	0s	26ms/step	
1/1	<div></div>	0s	35ms/step	
1/1	<div></div>	0s	26ms/step	
1/1	<div></div>	0s	31ms/step	
1/1	<div></div>	0s	33ms/step	
1/1	<div></div>	0s	29ms/step	
1/1	<div></div>	0s	27ms/step	
1/1	<div></div>	0s	31ms/step	
1/1	<div></div>	0s	34ms/step	
1/1	<div></div>	0s	26ms/step	
1/1	<div></div>	0s	29ms/step	
1/1	<div></div>	0s	38ms/step	
1/1	<div></div>	0s	38ms/step	

```
1/1 ————— 0s 27ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 36ms/step - loss: 0.0331
1/1 ————— 0s 30ms/step - loss: 0.0317
1/1 ————— 0s 29ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 36ms/step - loss: 0.0030
1/1 ————— 0s 27ms/step - loss: 0.0034
Epoch: 046/149 | Loss: 0.0034 | Episodes: 215 | Win count: 3 | Win rate: 0.064 | time: 298.8 seconds
1/1 ————— 0s 28ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 32ms/step - loss: 0.0024
1/1 ————— 0s 39ms/step - loss: 0.0026
1/1 ————— 0s 32ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 32ms/step
```

1/1		0s	34ms/step	
1/1		0s	32ms/step	
1/1		0s	28ms/step	
1/1		0s	26ms/step	
1/1		0s	30ms/step	
1/1		0s	29ms/step	
1/1		0s	29ms/step	
1/1		0s	31ms/step	
1/1		0s	27ms/step	
1/1		0s	34ms/step	
1/1		0s	27ms/step	
1/1		0s	27ms/step	
1/1		0s	30ms/step	
1/1		0s	28ms/step	
1/1		0s	33ms/step	
1/1		0s	37ms/step	
1/1		0s	33ms/step	- loss: 0.0040
1/1		0s	29ms/step	- loss: 0.0039
1/1		0s	35ms/step	
1/1		0s	30ms/step	
1/1		0s	25ms/step	
1/1		0s	32ms/step	
1/1		0s	30ms/step	
1/1		0s	31ms/step	
1/1		0s	31ms/step	
1/1		0s	40ms/step	
1/1		0s	29ms/step	
1/1		0s	34ms/step	
1/1		0s	29ms/step	
1/1		0s	33ms/step	
1/1		0s	38ms/step	
1/1		0s	36ms/step	
1/1		0s	29ms/step	
1/1		0s	30ms/step	
1/1		0s	28ms/step	
1/1		0s	28ms/step	
1/1		0s	29ms/step	
1/1		0s	30ms/step	
1/1		0s	30ms/step	- loss: 8.0960e-04
1/1		0s	35ms/step	- loss: 7.5362e-04
1/1		0s	32ms/step	
1/1		0s	31ms/step	
1/1		0s	27ms/step	
1/1		0s	24ms/step	
1/1		0s	27ms/step	
1/1		0s	37ms/step	
1/1		0s	32ms/step	
1/1		0s	26ms/step	
1/1		0s	26ms/step	
1/1		0s	37ms/step	
1/1		0s	27ms/step	
1/1		0s	30ms/step	
1/1		0s	27ms/step	
1/1		0s	30ms/step	
1/1		0s	47ms/step	
1/1		0s	29ms/step	

```
1/1 ————— 0s 27ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 32ms/step - loss: 0.0020
1/1 ————— 0s 31ms/step - loss: 0.0021
Epoch: 047/149 | Loss: 0.0021 | Episodes: 219 | Win count: 3 | Win rate: 0.062 | time: 304.7 seconds
1/1 ————— 0s 28ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 46ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 37ms/step - loss: 0.0033
1/1 ————— 0s 39ms/step - loss: 0.0031
1/1 ————— 0s 38ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 36ms/step - loss: 0.0028
1/1 ————— 0s 32ms/step - loss: 0.0026
1/1 ————— 0s 32ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 28ms/step
```

```
1/1 ————— 0s 26ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 53ms/step - loss: 0.0026
1/1 ————— 0s 31ms/step - loss: 0.0024
1/1 ————— 0s 32ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 30ms/step - loss: 0.0038
1/1 ————— 0s 28ms/step - loss: 0.0034
Epoch: 048/149 | Loss: 0.0034 | Episodes: 223 | Win count: 3 | Win rate: 0.061 | time: 310.8 seconds
1/1 ————— 0s 26ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 27ms/step
```

1/1	0s	25ms/step	
1/1	0s	28ms/step	
1/1	0s	26ms/step	
1/1	0s	25ms/step	
1/1	0s	33ms/step	
1/1	0s	26ms/step	
1/1	0s	28ms/step	- loss: 0.0021
1/1	0s	45ms/step	- loss: 0.0021
1/1	0s	35ms/step	
1/1	0s	34ms/step	
1/1	0s	30ms/step	
1/1	0s	33ms/step	
1/1	0s	31ms/step	
1/1	0s	30ms/step	
1/1	0s	30ms/step	
1/1	0s	31ms/step	
1/1	0s	32ms/step	
1/1	0s	28ms/step	
1/1	0s	32ms/step	
1/1	0s	39ms/step	
1/1	0s	29ms/step	
1/1	0s	42ms/step	
1/1	0s	36ms/step	
1/1	0s	32ms/step	
1/1	0s	40ms/step	
1/1	0s	36ms/step	
1/1	0s	30ms/step	
1/1	0s	26ms/step	
1/1	0s	32ms/step	- loss: 0.0035
1/1	0s	31ms/step	- loss: 0.0035
1/1	0s	29ms/step	
1/1	0s	26ms/step	
1/1	0s	40ms/step	
1/1	0s	29ms/step	
1/1	0s	27ms/step	
1/1	0s	40ms/step	
1/1	0s	31ms/step	
1/1	0s	25ms/step	
1/1	0s	34ms/step	
1/1	0s	30ms/step	
1/1	0s	32ms/step	
1/1	0s	26ms/step	
1/1	0s	33ms/step	
1/1	0s	37ms/step	
1/1	0s	32ms/step	
1/1	0s	28ms/step	
1/1	0s	36ms/step	
1/1	0s	29ms/step	
1/1	0s	29ms/step	
1/1	0s	31ms/step	
1/1	0s	36ms/step	- loss: 0.0033
1/1	0s	50ms/step	- loss: 0.0033
1/1	0s	29ms/step	
1/1	0s	28ms/step	
1/1	0s	36ms/step	
1/1	0s	34ms/step	


```
1/1 ————— 0s 47ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 29ms/step - loss: 0.0045
1/1 ————— 0s 32ms/step - loss: 0.0041
1/1 ————— 0s 26ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 50ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 34ms/step - loss: 0.0343
1/1 ————— 0s 49ms/step - loss: 0.0336
Epoch: 049/149 | Loss: 0.0336 | Episodes: 228 | Win count: 3 | Win rate: 0.060 | time: 318.5 seconds
1/1 ————— 0s 38ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 32ms/step
```

1/1	0s	26ms/step	
1/1	0s	29ms/step	
1/1	0s	38ms/step	
1/1	0s	30ms/step	
1/1	0s	31ms/step	
1/1	0s	29ms/step	
1/1	0s	34ms/step	- loss: 0.0024
1/1	0s	40ms/step	- loss: 0.0025
1/1	0s	42ms/step	
1/1	0s	28ms/step	
1/1	0s	35ms/step	
1/1	0s	30ms/step	
1/1	0s	29ms/step	
1/1	0s	28ms/step	
1/1	0s	35ms/step	
1/1	0s	29ms/step	
1/1	0s	35ms/step	
1/1	0s	33ms/step	
1/1	0s	27ms/step	
1/1	0s	30ms/step	
1/1	0s	35ms/step	
1/1	0s	32ms/step	
1/1	0s	34ms/step	
1/1	0s	37ms/step	
1/1	0s	36ms/step	
1/1	0s	44ms/step	
1/1	0s	36ms/step	
1/1	0s	34ms/step	
1/1	0s	37ms/step	- loss: 0.0028
1/1	0s	28ms/step	- loss: 0.0031
1/1	0s	28ms/step	
1/1	0s	23ms/step	
1/1	0s	28ms/step	
1/1	0s	34ms/step	
1/1	0s	30ms/step	
1/1	0s	30ms/step	
1/1	0s	33ms/step	
1/1	0s	32ms/step	
1/1	0s	36ms/step	
1/1	0s	34ms/step	
1/1	0s	27ms/step	
1/1	0s	32ms/step	
1/1	0s	29ms/step	
1/1	0s	46ms/step	
1/1	0s	27ms/step	
1/1	0s	34ms/step	
1/1	0s	38ms/step	
1/1	0s	30ms/step	
1/1	0s	31ms/step	
1/1	0s	31ms/step	
1/1	0s	31ms/step	- loss: 0.0032
1/1	0s	28ms/step	- loss: 0.0033
1/1	0s	29ms/step	
1/1	0s	39ms/step	
1/1	0s	38ms/step	
1/1	0s	27ms/step	

1/1		0s	32ms/step	
1/1		0s	43ms/step	
1/1		0s	29ms/step	
1/1		0s	26ms/step	
1/1		0s	28ms/step	
1/1		0s	30ms/step	
1/1		0s	27ms/step	
1/1		0s	27ms/step	
1/1		0s	30ms/step	
1/1		0s	31ms/step	
1/1		0s	27ms/step	
1/1		0s	30ms/step	
1/1		0s	34ms/step	
1/1		0s	28ms/step	
1/1		0s	30ms/step	
1/1		0s	32ms/step	
1/1		0s	38ms/step	loss: 0.0030
1/1		0s	30ms/step	loss: 0.0031
1/1		0s	25ms/step	
1/1		0s	25ms/step	
1/1		0s	26ms/step	
1/1		0s	35ms/step	
1/1		0s	29ms/step	
1/1		0s	24ms/step	
1/1		0s	26ms/step	
1/1		0s	27ms/step	
1/1		0s	32ms/step	
1/1		0s	27ms/step	
1/1		0s	45ms/step	
1/1		0s	31ms/step	
1/1		0s	27ms/step	
1/1		0s	30ms/step	
1/1		0s	30ms/step	
1/1		0s	33ms/step	
1/1		0s	41ms/step	
1/1		0s	36ms/step	
1/1		0s	32ms/step	
1/1		0s	31ms/step	
1/1		0s	33ms/step	loss: 0.0040
1/1		0s	33ms/step	loss: 0.0040
1/1		0s	29ms/step	
1/1		0s	24ms/step	
1/1		0s	29ms/step	
1/1		0s	27ms/step	
1/1		0s	27ms/step	
1/1		0s	30ms/step	
1/1		0s	27ms/step	
1/1		0s	28ms/step	
1/1		0s	32ms/step	
1/1		0s	29ms/step	
1/1		0s	31ms/step	
1/1		0s	39ms/step	
1/1		0s	34ms/step	
1/1		0s	31ms/step	
1/1		0s	28ms/step	
1/1		0s	30ms/step	

```
1/1 ————— 0s 29ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 34ms/step - loss: 0.0049
1/1 ————— 0s 34ms/step - loss: 0.0044
1/1 ————— 0s 34ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 47ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 44ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 31ms/step - loss: 0.0371
1/1 ————— 0s 32ms/step - loss: 0.0355
1/1 ————— 0s 27ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 44ms/step - loss: 0.0359
1/1 ————— 0s 45ms/step - loss: 0.0333
Epoch: 050/149 | Loss: 0.0333 | Episodes: 236 | Win count: 3 | Win rate: 0.059 | time: 330.7 seconds
1/1 ————— 0s 32ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 25ms/step
```

1/1		0s	27ms/step	
1/1		0s	33ms/step	
1/1		0s	28ms/step	
1/1		0s	26ms/step	
1/1		0s	37ms/step	
1/1		0s	27ms/step	
1/1		0s	39ms/step	
1/1		0s	29ms/step	
1/1		0s	25ms/step	
1/1		0s	23ms/step	
1/1		0s	28ms/step	
1/1		0s	32ms/step	
1/1		0s	32ms/step	
1/1		0s	39ms/step	
1/1		0s	29ms/step	
1/1		0s	26ms/step	
1/1		0s	41ms/step	- loss: 0.0029
1/1		0s	36ms/step	- loss: 0.0043
1/1		0s	35ms/step	
1/1		0s	43ms/step	
1/1		0s	31ms/step	
1/1		0s	28ms/step	
1/1		0s	30ms/step	
1/1		0s	32ms/step	
1/1		0s	32ms/step	
1/1		0s	32ms/step	
1/1		0s	29ms/step	
1/1		0s	33ms/step	
1/1		0s	30ms/step	
1/1		0s	34ms/step	
1/1		0s	37ms/step	
1/1		0s	31ms/step	
1/1		0s	26ms/step	
1/1		0s	39ms/step	
1/1		0s	32ms/step	
1/1		0s	32ms/step	
1/1		0s	36ms/step	
1/1		0s	34ms/step	
1/1		0s	39ms/step	- loss: 0.0024
1/1		0s	48ms/step	- loss: 0.0031
1/1		0s	35ms/step	
1/1		0s	36ms/step	
1/1		0s	30ms/step	
1/1		0s	30ms/step	
1/1		0s	28ms/step	
1/1		0s	35ms/step	
1/1		0s	43ms/step	
1/1		0s	31ms/step	
1/1		0s	28ms/step	
1/1		0s	29ms/step	
1/1		0s	28ms/step	
1/1		0s	31ms/step	
1/1		0s	27ms/step	
1/1		0s	31ms/step	
1/1		0s	28ms/step	
1/1		0s	29ms/step	

1/1	0s	34ms/step	
1/1	0s	44ms/step	
1/1	0s	33ms/step	
1/1	0s	25ms/step	
1/1	0s	42ms/step	- loss: 0.0276
1/1	0s	34ms/step	- loss: 0.0262
1/1	0s	29ms/step	
1/1	0s	28ms/step	
1/1	0s	40ms/step	
1/1	0s	31ms/step	
1/1	0s	29ms/step	
1/1	0s	25ms/step	
1/1	0s	28ms/step	
1/1	0s	29ms/step	
1/1	0s	31ms/step	
1/1	0s	34ms/step	
1/1	0s	30ms/step	
1/1	0s	41ms/step	
1/1	0s	34ms/step	
1/1	0s	36ms/step	
1/1	0s	32ms/step	
1/1	0s	31ms/step	
1/1	0s	35ms/step	
1/1	0s	27ms/step	
1/1	0s	38ms/step	
1/1	0s	37ms/step	
1/1	0s	39ms/step	- loss: 0.0048
1/1	0s	36ms/step	- loss: 0.0059
1/1	0s	32ms/step	
1/1	0s	25ms/step	
1/1	0s	33ms/step	
1/1	0s	30ms/step	
1/1	0s	27ms/step	
1/1	0s	25ms/step	
1/1	0s	31ms/step	
1/1	0s	30ms/step	
1/1	0s	33ms/step	
1/1	0s	30ms/step	
1/1	0s	28ms/step	
1/1	0s	28ms/step	
1/1	0s	27ms/step	
1/1	0s	25ms/step	
1/1	0s	33ms/step	
1/1	0s	32ms/step	
1/1	0s	31ms/step	
1/1	0s	32ms/step	
1/1	0s	28ms/step	
1/1	0s	36ms/step	
1/1	0s	31ms/step	- loss: 0.0012
1/1	0s	38ms/step	- loss: 0.0014
1/1	0s	28ms/step	
1/1	0s	26ms/step	
1/1	0s	27ms/step	
1/1	0s	31ms/step	
1/1	0s	25ms/step	
1/1	0s	28ms/step	

1/1		0s	30ms/step	
1/1		0s	34ms/step	
1/1		0s	29ms/step	
1/1		0s	27ms/step	
1/1		0s	41ms/step	
1/1		0s	33ms/step	
1/1		0s	32ms/step	
1/1		0s	34ms/step	
1/1		0s	29ms/step	
1/1		0s	27ms/step	
1/1		0s	25ms/step	
1/1		0s	27ms/step	
1/1		0s	33ms/step	
1/1		0s	34ms/step	
1/1		0s	46ms/step	- loss: 0.0036
1/1		0s	39ms/step	- loss: 0.0039
1/1		0s	33ms/step	
1/1		0s	29ms/step	
1/1		0s	29ms/step	
1/1		0s	29ms/step	
1/1		0s	29ms/step	
1/1		0s	26ms/step	
1/1		0s	38ms/step	
1/1		0s	32ms/step	
1/1		0s	28ms/step	
1/1		0s	30ms/step	
1/1		0s	27ms/step	
1/1		0s	32ms/step	
1/1		0s	33ms/step	
1/1		0s	25ms/step	
1/1		0s	27ms/step	
1/1		0s	31ms/step	
1/1		0s	32ms/step	
1/1		0s	28ms/step	
1/1		0s	28ms/step	
1/1		0s	27ms/step	
1/1		0s	41ms/step	- loss: 0.0250
1/1		0s	40ms/step	- loss: 0.0245
1/1		0s	28ms/step	
1/1		0s	30ms/step	
1/1		0s	31ms/step	
1/1		0s	40ms/step	
1/1		0s	25ms/step	
1/1		0s	28ms/step	
1/1		0s	31ms/step	
1/1		0s	36ms/step	
1/1		0s	32ms/step	
1/1		0s	32ms/step	
1/1		0s	25ms/step	
1/1		0s	26ms/step	
1/1		0s	37ms/step	
1/1		0s	34ms/step	
1/1		0s	41ms/step	
1/1		0s	32ms/step	
1/1		0s	34ms/step	
1/1		0s	30ms/step	

```
1/1 ————— 0s 30ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 34ms/step - loss: 0.0069
1/1 ————— 0s 30ms/step - loss: 0.0068
1/1 ————— 0s 29ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 44ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 42ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 51ms/step - loss: 0.0029
1/1 ————— 0s 37ms/step - loss: 0.0028
Epoch: 051/149 | Loss: 0.0028 | Episodes: 245 | Win count: 3 | Win rate: 0.058 | time: 344.4 seconds
1/1 ————— 0s 29ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 45ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 30ms/step - loss: 0.0028
1/1 ————— 0s 32ms/step - loss: 0.0028
1/1 ————— 0s 26ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 46ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 42ms/step
```



```
1/1 ————— 0s 35ms/step
1/1 ————— 0s 48ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 46ms/step
1/1 ————— 0s 28ms/step - loss: 0.0064
1/1 ————— 0s 32ms/step - loss: 0.0057
1/1 ————— 0s 29ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 39ms/step - loss: 0.0033
1/1 ————— 0s 27ms/step - loss: 0.0032
Epoch: 052/149 | Loss: 0.0032 | Episodes: 248 | Win count: 3 | Win rate: 0.057 | time: 349.0 seconds
1/1 ————— 0s 31ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 35ms/step
```

1/1	=====	0s	28ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	25ms/step	
1/1	=====	0s	26ms/step	
1/1	=====	0s	31ms/step	- loss: 0.0052
1/1	=====	0s	37ms/step	- loss: 0.0043
1/1	=====	0s	37ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	24ms/step	
1/1	=====	0s	27ms/step	
1/1	=====	0s	26ms/step	
1/1	=====	0s	25ms/step	
1/1	=====	0s	27ms/step	
1/1	=====	0s	27ms/step	
1/1	=====	0s	29ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	35ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	26ms/step	
1/1	=====	0s	29ms/step	
1/1	=====	0s	36ms/step	
1/1	=====	0s	29ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	29ms/step	
1/1	=====	0s	30ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	31ms/step	- loss: 0.0272
1/1	=====	0s	35ms/step	- loss: 0.0277
1/1	=====	0s	28ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	27ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	26ms/step	
1/1	=====	0s	29ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	37ms/step	
1/1	=====	0s	27ms/step	
1/1	=====	0s	28ms/step	
1/1	=====	0s	25ms/step	
1/1	=====	0s	30ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	27ms/step	
1/1	=====	0s	29ms/step	
1/1	=====	0s	25ms/step	
1/1	=====	0s	27ms/step	
1/1	=====	0s	42ms/step	
1/1	=====	0s	30ms/step	
1/1	=====	0s	30ms/step	
1/1	=====	0s	35ms/step	- loss: 0.0048
1/1	=====	0s	36ms/step	- loss: 0.0039
1/1	=====	0s	29ms/step	
1/1	=====	0s	30ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	30ms/step	

```
1/1 ————— 0s 30ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 31ms/step - loss: 0.0029
1/1 ————— 0s 29ms/step - loss: 0.0031
1/1 ————— 0s 32ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 44ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 36ms/step - loss: 0.0018
1/1 ————— 0s 36ms/step - loss: 0.0019
Epoch: 053/149 | Loss: 0.0019 | Episodes: 253 | Win count: 3 | Win rate: 0.056 | time: 356.6 seconds
1/1 ————— 0s 35ms/step
1/1 ————— 0s 45ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 43ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 29ms/step
```

1/1	0s	31ms/step	
1/1	0s	34ms/step	
1/1	0s	30ms/step	
1/1	0s	25ms/step	
1/1	0s	33ms/step	- loss: 0.0026
1/1	0s	32ms/step	- loss: 0.0025
1/1	0s	30ms/step	
1/1	0s	29ms/step	
1/1	0s	43ms/step	
1/1	0s	41ms/step	
1/1	0s	28ms/step	
1/1	0s	28ms/step	
1/1	0s	26ms/step	
1/1	0s	31ms/step	
1/1	0s	29ms/step	
1/1	0s	30ms/step	
1/1	0s	26ms/step	
1/1	0s	31ms/step	
1/1	0s	28ms/step	
1/1	0s	26ms/step	
1/1	0s	39ms/step	
1/1	0s	37ms/step	
1/1	0s	35ms/step	
1/1	0s	38ms/step	
1/1	0s	36ms/step	
1/1	0s	28ms/step	
1/1	0s	43ms/step	- loss: 0.0023
1/1	0s	37ms/step	- loss: 0.0025
1/1	0s	33ms/step	
1/1	0s	31ms/step	
1/1	0s	29ms/step	
1/1	0s	25ms/step	
1/1	0s	27ms/step	
1/1	0s	29ms/step	
1/1	0s	24ms/step	
1/1	0s	33ms/step	
1/1	0s	28ms/step	
1/1	0s	26ms/step	
1/1	0s	31ms/step	
1/1	0s	29ms/step	
1/1	0s	28ms/step	
1/1	0s	28ms/step	
1/1	0s	30ms/step	
1/1	0s	27ms/step	
1/1	0s	33ms/step	
1/1	0s	36ms/step	
1/1	0s	38ms/step	
1/1	0s	29ms/step	
1/1	0s	40ms/step	- loss: 0.0019
1/1	0s	31ms/step	- loss: 0.0019
1/1	0s	26ms/step	
1/1	0s	29ms/step	
1/1	0s	29ms/step	
1/1	0s	39ms/step	
1/1	0s	32ms/step	
1/1	0s	32ms/step	

```
1/1 0s 30ms/step
1/1 0s 31ms/step
1/1 0s 27ms/step
1/1 0s 32ms/step
1/1 0s 33ms/step
1/1 0s 30ms/step
1/1 0s 35ms/step
1/1 0s 41ms/step
1/1 0s 49ms/step
1/1 0s 39ms/step
1/1 0s 35ms/step
1/1 0s 33ms/step
1/1 0s 31ms/step
1/1 0s 30ms/step
1/1 0s 42ms/step - loss: 0.0021
1/1 0s 35ms/step - loss: 0.0022
Epoch: 054/149 | Loss: 0.0022 | Episodes: 257 | Win count: 3 | Win rate: 0.055 | time: 362.8 seconds
1/1 0s 30ms/step
1/1 0s 38ms/step
1/1 0s 34ms/step
1/1 0s 51ms/step
1/1 0s 38ms/step
1/1 0s 57ms/step
1/1 0s 40ms/step
1/1 0s 36ms/step
1/1 0s 34ms/step
1/1 0s 32ms/step
1/1 0s 30ms/step
1/1 0s 29ms/step
1/1 0s 29ms/step
1/1 0s 28ms/step
1/1 0s 32ms/step
1/1 0s 31ms/step
1/1 0s 33ms/step
1/1 0s 28ms/step
1/1 0s 29ms/step
1/1 0s 27ms/step
1/1 0s 29ms/step - loss: 0.0031
1/1 0s 30ms/step - loss: 0.0030
1/1 0s 29ms/step
1/1 0s 32ms/step
1/1 0s 33ms/step
1/1 0s 33ms/step
1/1 0s 31ms/step
1/1 0s 29ms/step
1/1 0s 28ms/step
1/1 0s 26ms/step
1/1 0s 27ms/step
1/1 0s 24ms/step
1/1 0s 30ms/step
1/1 0s 28ms/step
1/1 0s 26ms/step
1/1 0s 44ms/step
1/1 0s 31ms/step
1/1 0s 33ms/step
```

```
1/1 ————— 0s 36ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 43ms/step - loss: 0.0029
1/1 ————— 0s 33ms/step - loss: 0.0029
1/1 ————— 0s 26ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 53ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 30ms/step - loss: 0.0033
1/1 ————— 0s 32ms/step - loss: 0.0032
1/1 ————— 0s 31ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 31ms/step - loss: 0.0038
1/1 ————— 0s 30ms/step - loss: 0.0034
Epoch: 055/149 | Loss: 0.0034 | Episodes: 261 | Win count: 3 | Win rate: 0.054 | time: 368.8 seconds
1/1 ————— 0s 29ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 41ms/step
```

1/1		0s	34ms/step	
1/1		0s	55ms/step	
1/1		0s	39ms/step	
1/1		0s	36ms/step	
1/1		0s	34ms/step	
1/1		0s	28ms/step	
1/1		0s	30ms/step	
1/1		0s	26ms/step	
1/1		0s	28ms/step	
1/1		0s	29ms/step	
1/1		0s	28ms/step	
1/1		0s	29ms/step	
1/1		0s	32ms/step	
1/1		0s	34ms/step	
1/1		0s	30ms/step	
1/1		0s	39ms/step	
1/1		0s	34ms/step	- loss: 0.0024
1/1		0s	37ms/step	- loss: 0.0021
1/1		0s	28ms/step	
1/1		0s	33ms/step	
1/1		0s	35ms/step	
1/1		0s	32ms/step	
1/1		0s	32ms/step	
1/1		0s	28ms/step	
1/1		0s	27ms/step	
1/1		0s	31ms/step	
1/1		0s	31ms/step	
1/1		0s	30ms/step	
1/1		0s	33ms/step	
1/1		0s	30ms/step	
1/1		0s	28ms/step	
1/1		0s	29ms/step	
1/1		0s	30ms/step	
1/1		0s	32ms/step	
1/1		0s	29ms/step	
1/1		0s	41ms/step	
1/1		0s	29ms/step	
1/1		0s	36ms/step	
1/1		0s	48ms/step	- loss: 0.0029
1/1		0s	40ms/step	- loss: 0.0029
1/1		0s	36ms/step	
1/1		0s	34ms/step	
1/1		0s	43ms/step	
1/1		0s	33ms/step	
1/1		0s	32ms/step	
1/1		0s	32ms/step	
1/1		0s	32ms/step	
1/1		0s	34ms/step	
1/1		0s	26ms/step	
1/1		0s	26ms/step	
1/1		0s	31ms/step	
1/1		0s	27ms/step	
1/1		0s	28ms/step	
1/1		0s	27ms/step	
1/1		0s	31ms/step	
1/1		0s	38ms/step	

```
1/1 0s 34ms/step
1/1 0s 27ms/step
1/1 0s 56ms/step
1/1 0s 32ms/step
1/1 0s 30ms/step - loss: 0.0327
1/1 0s 33ms/step - loss: 0.0315
Epoch: 056/149 | Loss: 0.0315 | Episodes: 264 | Win count: 3 | Win rate: 0.053 | time: 373.5 seconds
1/1 0s 32ms/step
1/1 0s 31ms/step
1/1 0s 29ms/step
1/1 0s 33ms/step
1/1 0s 35ms/step
1/1 0s 33ms/step
1/1 0s 31ms/step
1/1 0s 33ms/step
1/1 0s 37ms/step
1/1 0s 40ms/step
1/1 0s 45ms/step
1/1 0s 29ms/step
1/1 0s 28ms/step
1/1 0s 30ms/step
1/1 0s 30ms/step
1/1 0s 30ms/step
1/1 0s 25ms/step
1/1 0s 25ms/step
1/1 0s 28ms/step
1/1 0s 29ms/step
1/1 0s 32ms/step - loss: 0.0022
1/1 0s 34ms/step - loss: 0.0024
1/1 0s 29ms/step
1/1 0s 33ms/step
1/1 0s 30ms/step
1/1 0s 30ms/step
1/1 0s 26ms/step
1/1 0s 30ms/step
1/1 0s 39ms/step
1/1 0s 30ms/step
1/1 0s 28ms/step
1/1 0s 27ms/step
1/1 0s 30ms/step
1/1 0s 27ms/step
1/1 0s 36ms/step
1/1 0s 30ms/step
1/1 0s 26ms/step
1/1 0s 28ms/step
1/1 0s 27ms/step
1/1 0s 27ms/step
1/1 0s 34ms/step
1/1 0s 30ms/step
1/1 0s 30ms/step - loss: 0.0029
1/1 0s 33ms/step - loss: 0.0032
1/1 0s 33ms/step
1/1 0s 47ms/step
1/1 0s 39ms/step
1/1 0s 32ms/step
```



```
1/1 0s 27ms/step
1/1 0s 32ms/step
1/1 0s 29ms/step
1/1 0s 28ms/step
1/1 0s 28ms/step
1/1 0s 24ms/step
1/1 0s 36ms/step
1/1 0s 24ms/step
1/1 0s 32ms/step
1/1 0s 33ms/step
1/1 0s 29ms/step
1/1 0s 27ms/step
1/1 0s 30ms/step
1/1 0s 31ms/step
1/1 0s 24ms/step
1/1 0s 29ms/step
1/1 0s 44ms/step - loss: 0.0049
1/1 0s 28ms/step - loss: 0.0052
1/1 0s 28ms/step
1/1 0s 29ms/step
1/1 0s 28ms/step
1/1 0s 30ms/step
1/1 0s 33ms/step
1/1 0s 31ms/step
1/1 0s 31ms/step
1/1 0s 30ms/step
1/1 0s 35ms/step
1/1 0s 36ms/step
1/1 0s 37ms/step
1/1 0s 31ms/step
1/1 0s 31ms/step
1/1 0s 29ms/step
1/1 0s 33ms/step
1/1 0s 34ms/step
1/1 0s 32ms/step
1/1 0s 46ms/step
1/1 0s 33ms/step
1/1 0s 28ms/step
1/1 0s 42ms/step - loss: 0.0019
1/1 0s 44ms/step - loss: 0.0019
Epoch: 057/149 | Loss: 0.0019 | Episodes: 268 | Win count: 3 | Win rate: 0.052 | time: 379.6 seconds
1/1 0s 28ms/step
1/1 0s 37ms/step
1/1 0s 28ms/step
1/1 0s 26ms/step
1/1 0s 29ms/step
1/1 0s 26ms/step
1/1 0s 31ms/step
1/1 0s 30ms/step
1/1 0s 32ms/step
1/1 0s 30ms/step
1/1 0s 34ms/step
1/1 0s 47ms/step
1/1 0s 31ms/step
1/1 0s 30ms/step
```

1/1	0s	29ms/step	
1/1	0s	31ms/step	
1/1	0s	26ms/step	
1/1	0s	31ms/step	
1/1	0s	25ms/step	
1/1	0s	26ms/step	
1/1	0s	32ms/step	- loss: 0.0035
1/1	0s	27ms/step	- loss: 0.0035
1/1	0s	30ms/step	
1/1	0s	26ms/step	
1/1	0s	28ms/step	
1/1	0s	29ms/step	
1/1	0s	33ms/step	
1/1	0s	37ms/step	
1/1	0s	34ms/step	
1/1	0s	37ms/step	
1/1	0s	32ms/step	
1/1	0s	31ms/step	
1/1	0s	29ms/step	
1/1	0s	27ms/step	
1/1	0s	27ms/step	
1/1	0s	33ms/step	
1/1	0s	29ms/step	
1/1	0s	28ms/step	
1/1	0s	39ms/step	
1/1	0s	29ms/step	
1/1	0s	25ms/step	
1/1	0s	26ms/step	
1/1	0s	36ms/step	- loss: 0.0038
1/1	0s	36ms/step	- loss: 0.0037
1/1	0s	27ms/step	
1/1	0s	42ms/step	
1/1	0s	41ms/step	
1/1	0s	27ms/step	
1/1	0s	26ms/step	
1/1	0s	31ms/step	
1/1	0s	35ms/step	
1/1	0s	32ms/step	
1/1	0s	36ms/step	
1/1	0s	44ms/step	
1/1	0s	32ms/step	
1/1	0s	37ms/step	
1/1	0s	32ms/step	
1/1	0s	29ms/step	
1/1	0s	30ms/step	
1/1	0s	32ms/step	
1/1	0s	27ms/step	
1/1	0s	34ms/step	
1/1	0s	35ms/step	
1/1	0s	37ms/step	
1/1	0s	32ms/step	- loss: 0.0035
1/1	0s	34ms/step	- loss: 0.0032
1/1	0s	31ms/step	
1/1	0s	26ms/step	
1/1	0s	27ms/step	
1/1	0s	41ms/step	

```
1/1 ————— 0s 31ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 57ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 40ms/step - loss: 0.0022
1/1 ————— 0s 28ms/step - loss: 0.0021
Epoch: 058/149 | Loss: 0.0021 | Episodes: 272 | Win count: 3 | Win rate: 0.051 | time: 385.6 seconds
1/1 ————— 0s 36ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 23ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 31ms/step - loss: 0.0031
1/1 ————— 0s 35ms/step - loss: 0.0029
1/1 ————— 0s 28ms/step
1/1 ————— 0s 47ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 48ms/step
```

```
1/1 ————— 0s 31ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 36ms/step - loss: 0.0031
1/1 ————— 0s 36ms/step - loss: 0.0028
1/1 ————— 0s 34ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 44ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 37ms/step - loss: 0.0016
1/1 ————— 0s 46ms/step - loss: 0.0017
1/1 ————— 0s 35ms/step
1/1 ————— 0s 50ms/step
1/1 ————— 0s 49ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 40ms/step - loss: 0.0297
1/1 ————— 0s 32ms/step - loss: 0.0291
1/1 ————— 0s 33ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 30ms/step
```

```
1/1 ————— 0s 31ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 33ms/step - loss: 0.0026
1/1 ————— 0s 35ms/step - loss: 0.0025
1/1 ————— 0s 33ms/step
1/1 ————— 0s 45ms/step
1/1 ————— 0s 42ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 39ms/step - loss: 0.0038
1/1 ————— 0s 43ms/step - loss: 0.0037
Epoch: 059/149 | Loss: 0.0037 | Episodes: 278 | Win count: 3 | Win rate: 0.050 | time: 395.1 seconds
1/1 ————— 0s 28ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 33ms/step
```

1/1	0s	34ms/step	
1/1	0s	27ms/step	
1/1	0s	28ms/step	
1/1	0s	41ms/step	
1/1	0s	32ms/step	
1/1	0s	36ms/step	
1/1	0s	37ms/step	- loss: 0.0015
1/1	0s	42ms/step	- loss: 0.0015
1/1	0s	30ms/step	
1/1	0s	30ms/step	
1/1	0s	25ms/step	
1/1	0s	30ms/step	
1/1	0s	25ms/step	
1/1	0s	29ms/step	
1/1	0s	43ms/step	
1/1	0s	25ms/step	
1/1	0s	32ms/step	
1/1	0s	41ms/step	
1/1	0s	30ms/step	
1/1	0s	31ms/step	
1/1	0s	27ms/step	
1/1	0s	30ms/step	
1/1	0s	29ms/step	
1/1	0s	30ms/step	
1/1	0s	24ms/step	
1/1	0s	29ms/step	
1/1	0s	31ms/step	
1/1	0s	27ms/step	
1/1	0s	33ms/step	- loss: 0.0017
1/1	0s	35ms/step	- loss: 0.0016
1/1	0s	33ms/step	
1/1	0s	30ms/step	
1/1	0s	30ms/step	
1/1	0s	37ms/step	
1/1	0s	40ms/step	
1/1	0s	37ms/step	
1/1	0s	31ms/step	
1/1	0s	30ms/step	
1/1	0s	26ms/step	
1/1	0s	31ms/step	
1/1	0s	30ms/step	
1/1	0s	27ms/step	
1/1	0s	30ms/step	
1/1	0s	34ms/step	
1/1	0s	27ms/step	
1/1	0s	34ms/step	
1/1	0s	33ms/step	
1/1	0s	30ms/step	
1/1	0s	25ms/step	
1/1	0s	36ms/step	
1/1	0s	32ms/step	- loss: 0.0022
1/1	0s	34ms/step	- loss: 0.0021
1/1	0s	34ms/step	
1/1	0s	32ms/step	
1/1	0s	30ms/step	
1/1	0s	25ms/step	

```
1/1 ————— 0s 34ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 36ms/step - loss: 0.0016
1/1 ————— 0s 35ms/step - loss: 0.0017
1/1 ————— 0s 29ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 47ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 43ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 27ms/step - loss: 0.0292
1/1 ————— 0s 34ms/step - loss: 0.0280
Epoch: 060/149 | Loss: 0.0280 | Episodes: 283 | Win count: 3 | Win rate: 0.049 | time: 6.71 minutes
1/1 ————— 0s 40ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 31ms/step
```

```
1/1 ————— 0s 28ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 32ms/step - loss: 0.0023
1/1 ————— 0s 33ms/step - loss: 0.0021
1/1 ————— 0s 31ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 42ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 35ms/step - loss: 0.0023
1/1 ————— 0s 31ms/step - loss: 0.0022
1/1 ————— 0s 33ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 33ms/step - loss: 0.0050
1/1 ————— 0s 31ms/step - loss: 0.0053
1/1 ————— 0s 32ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 29ms/step
```



```
1/1 ————— 0s 31ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 32ms/step - loss: 0.0064
1/1 ————— 0s 32ms/step - loss: 0.0062
Epoch: 061/149 | Loss: 0.0062 | Episodes: 287 | Win count: 3 | Win rate: 0.048 | time: 6.81 minutes
1/1 ————— 0s 31ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 43ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 28ms/step - loss: 0.0038
1/1 ————— 0s 31ms/step - loss: 0.0037
1/1 ————— 0s 30ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 44ms/step
```

1/1	0s	36ms/step	
1/1	0s	32ms/step	
1/1	0s	48ms/step	
1/1	0s	28ms/step	
1/1	0s	34ms/step	
1/1	0s	33ms/step	
1/1	0s	31ms/step	- loss: 0.0020
1/1	0s	38ms/step	- loss: 0.0018
1/1	0s	37ms/step	
1/1	0s	28ms/step	
1/1	0s	35ms/step	
1/1	0s	30ms/step	
1/1	0s	29ms/step	
1/1	0s	23ms/step	
1/1	0s	31ms/step	
1/1	0s	34ms/step	
1/1	0s	33ms/step	
1/1	0s	29ms/step	
1/1	0s	34ms/step	
1/1	0s	29ms/step	
1/1	0s	32ms/step	
1/1	0s	31ms/step	
1/1	0s	26ms/step	
1/1	0s	31ms/step	
1/1	0s	26ms/step	
1/1	0s	36ms/step	
1/1	0s	36ms/step	
1/1	0s	33ms/step	
1/1	0s	32ms/step	- loss: 0.0032
1/1	0s	32ms/step	- loss: 0.0031
1/1	0s	31ms/step	
1/1	0s	32ms/step	
1/1	0s	32ms/step	
1/1	0s	33ms/step	
1/1	0s	32ms/step	
1/1	0s	37ms/step	
1/1	0s	40ms/step	
1/1	0s	30ms/step	
1/1	0s	36ms/step	
1/1	0s	28ms/step	
1/1	0s	36ms/step	
1/1	0s	45ms/step	
1/1	0s	32ms/step	
1/1	0s	33ms/step	
1/1	0s	39ms/step	
1/1	0s	38ms/step	
1/1	0s	29ms/step	
1/1	0s	34ms/step	
1/1	0s	35ms/step	
1/1	0s	37ms/step	
1/1	0s	33ms/step	- loss: 0.0030
1/1	0s	35ms/step	- loss: 0.0028
1/1	0s	33ms/step	
1/1	0s	30ms/step	
1/1	0s	30ms/step	
1/1	0s	27ms/step	

1/1		0s	35ms/step	
1/1		0s	33ms/step	
1/1		0s	37ms/step	
1/1		0s	32ms/step	
1/1		0s	30ms/step	
1/1		0s	31ms/step	
1/1		0s	33ms/step	
1/1		0s	26ms/step	
1/1		0s	30ms/step	
1/1		0s	33ms/step	
1/1		0s	33ms/step	
1/1		0s	34ms/step	
1/1		0s	28ms/step	
1/1		0s	29ms/step	
1/1		0s	29ms/step	
1/1		0s	26ms/step	
1/1		0s	42ms/step	loss: 0.0056
1/1		0s	31ms/step	loss: 0.0051
1/1		0s	28ms/step	
1/1		0s	37ms/step	
1/1		0s	32ms/step	
1/1		0s	30ms/step	
1/1		0s	27ms/step	
1/1		0s	39ms/step	
1/1		0s	28ms/step	
1/1		0s	38ms/step	
1/1		0s	32ms/step	
1/1		0s	38ms/step	
1/1		0s	25ms/step	
1/1		0s	28ms/step	
1/1		0s	29ms/step	
1/1		0s	28ms/step	
1/1		0s	29ms/step	
1/1		0s	30ms/step	
1/1		0s	32ms/step	
1/1		0s	30ms/step	
1/1		0s	32ms/step	
1/1		0s	35ms/step	
1/1		0s	42ms/step	loss: 0.0024
1/1		0s	32ms/step	loss: 0.0023
1/1		0s	30ms/step	
1/1		0s	38ms/step	
1/1		0s	28ms/step	
1/1		0s	29ms/step	
1/1		0s	30ms/step	
1/1		0s	26ms/step	
1/1		0s	25ms/step	
1/1		0s	32ms/step	
1/1		0s	33ms/step	
1/1		0s	34ms/step	
1/1		0s	28ms/step	
1/1		0s	37ms/step	
1/1		0s	28ms/step	
1/1		0s	29ms/step	
1/1		0s	33ms/step	
1/1		0s	34ms/step	

```
1/1 ————— 0s 29ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 32ms/step - loss: 0.0367
1/1 ————— 0s 37ms/step - loss: 0.0345
Epoch: 062/149 | Loss: 0.0345 | Episodes: 294 | Win count: 3 | Win rate: 0.048 | time: 6.99 minutes
1/1 ————— 0s 30ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 45ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 36ms/step - loss: 0.0023
1/1 ————— 0s 38ms/step - loss: 0.0022
1/1 ————— 0s 28ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 35ms/step - loss: 0.0028
1/1 ————— 0s 43ms/step - loss: 0.0031
1/1 ————— 0s 36ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 31ms/step
```

1/1		0s	26ms/step	
1/1		0s	31ms/step	
1/1		0s	26ms/step	
1/1		0s	27ms/step	
1/1		0s	28ms/step	
1/1		0s	32ms/step	
1/1		0s	26ms/step	
1/1		0s	29ms/step	
1/1		0s	25ms/step	
1/1		0s	27ms/step	
1/1		0s	28ms/step	
1/1		0s	30ms/step	
1/1		0s	35ms/step	
1/1		0s	34ms/step	
1/1		0s	37ms/step	
1/1		0s	31ms/step	
1/1		0s	35ms/step	- loss: 0.0014
1/1		0s	36ms/step	- loss: 0.0016
1/1		0s	28ms/step	
1/1		0s	29ms/step	
1/1		0s	36ms/step	
1/1		0s	34ms/step	
1/1		0s	40ms/step	
1/1		0s	43ms/step	
1/1		0s	32ms/step	
1/1		0s	34ms/step	
1/1		0s	27ms/step	
1/1		0s	28ms/step	
1/1		0s	28ms/step	
1/1		0s	30ms/step	
1/1		0s	35ms/step	
1/1		0s	37ms/step	
1/1		0s	27ms/step	
1/1		0s	37ms/step	
1/1		0s	26ms/step	
1/1		0s	28ms/step	
1/1		0s	24ms/step	
1/1		0s	33ms/step	
1/1		0s	28ms/step	- loss: 0.0013
1/1		0s	38ms/step	- loss: 0.0017
1/1		0s	28ms/step	
1/1		0s	27ms/step	
1/1		0s	31ms/step	
1/1		0s	29ms/step	
1/1		0s	34ms/step	
1/1		0s	30ms/step	
1/1		0s	29ms/step	
1/1		0s	28ms/step	
1/1		0s	36ms/step	
1/1		0s	31ms/step	
1/1		0s	35ms/step	
1/1		0s	29ms/step	
1/1		0s	29ms/step	
1/1		0s	27ms/step	
1/1		0s	30ms/step	
1/1		0s	32ms/step	

```
1/1 0s 29ms/step
1/1 0s 31ms/step
1/1 0s 30ms/step
1/1 0s 27ms/step
1/1 0s 32ms/step - loss: 0.0039
1/1 0s 32ms/step - loss: 0.0042
Epoch: 063/149 | Loss: 0.0042 | Episodes: 299 | Win count: 3 | Win rate: 0.047 | time: 7.11 minutes
1/1 0s 25ms/step
1/1 0s 34ms/step
1/1 0s 28ms/step
1/1 0s 26ms/step
1/1 0s 34ms/step
1/1 0s 46ms/step
1/1 0s 40ms/step
1/1 0s 35ms/step
1/1 0s 32ms/step
1/1 0s 31ms/step
1/1 0s 29ms/step
1/1 0s 28ms/step
1/1 0s 29ms/step
1/1 0s 28ms/step
1/1 0s 31ms/step
1/1 0s 44ms/step
1/1 0s 31ms/step
1/1 0s 26ms/step
1/1 0s 31ms/step
1/1 0s 33ms/step
1/1 0s 34ms/step - loss: 7.4915e-04
1/1 0s 35ms/step - loss: 8.5116e-04
1/1 0s 36ms/step
1/1 0s 32ms/step
1/1 0s 26ms/step
1/1 0s 32ms/step
1/1 0s 33ms/step
1/1 0s 28ms/step
1/1 0s 30ms/step
1/1 0s 30ms/step
1/1 0s 30ms/step
1/1 0s 38ms/step
1/1 0s 32ms/step
1/1 0s 29ms/step
1/1 0s 32ms/step
1/1 0s 29ms/step
1/1 0s 40ms/step
1/1 0s 29ms/step
1/1 0s 27ms/step
1/1 0s 34ms/step
1/1 0s 36ms/step
1/1 0s 37ms/step
1/1 0s 37ms/step - loss: 0.0049
1/1 0s 41ms/step - loss: 0.0046
1/1 0s 36ms/step
1/1 0s 38ms/step
1/1 0s 27ms/step
1/1 0s 41ms/step
```

```
1/1 ————— 0s 33ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 35ms/step - loss: 0.0074
1/1 ————— 0s 32ms/step - loss: 0.0059
Epoch: 064/149 | Loss: 0.0059 | Episodes: 302 | Win count: 3 | Win rate: 0.046 | time: 7.19 minutes
1/1 ————— 0s 30ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 45ms/step
1/1 ————— 0s 42ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 37ms/step - loss: 0.0034
1/1 ————— 0s 40ms/step - loss: 0.0028
1/1 ————— 0s 32ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 32ms/step
```

```
1/1 ————— 0s 31ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 34ms/step - loss: 0.0063
1/1 ————— 0s 40ms/step - loss: 0.0060
1/1 ————— 0s 25ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 49ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 43ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 33ms/step - loss: 0.0368
1/1 ————— 0s 31ms/step - loss: 0.0348
1/1 ————— 0s 27ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 23ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 33ms/step - loss: 0.0018
1/1 ————— 0s 34ms/step - loss: 0.0027
1/1 ————— 0s 42ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 31ms/step
```


1/1		0s	33ms/step	
1/1		0s	36ms/step	
1/1		0s	38ms/step	
1/1		0s	42ms/step	
1/1		0s	27ms/step	
1/1		0s	31ms/step	
1/1		0s	27ms/step	
1/1		0s	24ms/step	
1/1		0s	31ms/step	
1/1		0s	39ms/step	
1/1		0s	30ms/step	
1/1		0s	30ms/step	
1/1		0s	33ms/step	
1/1		0s	28ms/step	
1/1		0s	26ms/step	
1/1		0s	25ms/step	
1/1		0s	32ms/step	- loss: 0.0016
1/1		0s	30ms/step	- loss: 0.0024
1/1		0s	25ms/step	
1/1		0s	26ms/step	
1/1		0s	28ms/step	
1/1		0s	29ms/step	
1/1		0s	31ms/step	
1/1		0s	25ms/step	
1/1		0s	30ms/step	
1/1		0s	25ms/step	
1/1		0s	30ms/step	
1/1		0s	29ms/step	
1/1		0s	26ms/step	
1/1		0s	31ms/step	
1/1		0s	26ms/step	
1/1		0s	29ms/step	
1/1		0s	46ms/step	
1/1		0s	40ms/step	
1/1		0s	34ms/step	
1/1		0s	35ms/step	
1/1		0s	29ms/step	
1/1		0s	34ms/step	
1/1		0s	36ms/step	- loss: 0.0029
1/1		0s	37ms/step	- loss: 0.0033
1/1		0s	25ms/step	
1/1		0s	28ms/step	
1/1		0s	27ms/step	
1/1		0s	28ms/step	
1/1		0s	32ms/step	
1/1		0s	30ms/step	
1/1		0s	27ms/step	
1/1		0s	32ms/step	
1/1		0s	45ms/step	
1/1		0s	43ms/step	
1/1		0s	32ms/step	
1/1		0s	34ms/step	
1/1		0s	33ms/step	
1/1		0s	30ms/step	
1/1		0s	33ms/step	
1/1		0s	35ms/step	

```
1/1 0s 30ms/step
1/1 0s 29ms/step
1/1 0s 31ms/step
1/1 0s 29ms/step
1/1 0s 32ms/step - loss: 0.0066
1/1 0s 50ms/step - loss: 0.0068
Epoch: 065/149 | Loss: 0.0068 | Episodes: 309 | Win count: 3 | Win rate: 0.045 | time: 7.37 minutes
1/1 0s 32ms/step
1/1 0s 31ms/step
1/1 0s 32ms/step
1/1 0s 26ms/step
1/1 0s 36ms/step
1/1 0s 28ms/step
1/1 0s 28ms/step
1/1 0s 31ms/step
1/1 0s 31ms/step
1/1 0s 34ms/step
1/1 0s 35ms/step
1/1 0s 32ms/step
1/1 0s 35ms/step
1/1 0s 39ms/step
1/1 0s 30ms/step
1/1 0s 32ms/step
1/1 0s 33ms/step
1/1 0s 32ms/step
1/1 0s 31ms/step
1/1 0s 26ms/step
1/1 0s 35ms/step - loss: 0.0018
1/1 0s 32ms/step - loss: 0.0020
1/1 0s 30ms/step
1/1 0s 30ms/step
1/1 0s 37ms/step
1/1 0s 33ms/step
1/1 0s 37ms/step
1/1 0s 47ms/step
1/1 0s 32ms/step
1/1 0s 30ms/step
1/1 0s 28ms/step
1/1 0s 35ms/step
1/1 0s 32ms/step
1/1 0s 30ms/step
1/1 0s 32ms/step
1/1 0s 27ms/step
1/1 0s 35ms/step
1/1 0s 34ms/step
1/1 0s 33ms/step
1/1 0s 41ms/step
1/1 0s 31ms/step
1/1 0s 38ms/step
1/1 0s 39ms/step - loss: 0.0045
1/1 0s 43ms/step - loss: 0.0042
1/1 0s 42ms/step
1/1 0s 33ms/step
1/1 0s 26ms/step
1/1 0s 29ms/step
```

1/1	0s	28ms/step	
1/1	0s	29ms/step	
1/1	0s	28ms/step	
1/1	0s	29ms/step	
1/1	0s	25ms/step	
1/1	0s	30ms/step	
1/1	0s	31ms/step	
1/1	0s	29ms/step	
1/1	0s	31ms/step	
1/1	0s	28ms/step	
1/1	0s	24ms/step	
1/1	0s	29ms/step	
1/1	0s	34ms/step	
1/1	0s	35ms/step	
1/1	0s	30ms/step	
1/1	0s	29ms/step	
1/1	0s	34ms/step	- loss: 0.0030
1/1	0s	27ms/step	- loss: 0.0028
1/1	0s	31ms/step	
1/1	0s	26ms/step	
1/1	0s	28ms/step	
1/1	0s	26ms/step	
1/1	0s	23ms/step	
1/1	0s	37ms/step	
1/1	0s	29ms/step	
1/1	0s	29ms/step	
1/1	0s	35ms/step	
1/1	0s	36ms/step	
1/1	0s	27ms/step	
1/1	0s	26ms/step	
1/1	0s	27ms/step	
1/1	0s	38ms/step	
1/1	0s	28ms/step	
1/1	0s	27ms/step	
1/1	0s	25ms/step	
1/1	0s	24ms/step	
1/1	0s	28ms/step	
1/1	0s	29ms/step	
1/1	0s	57ms/step	- loss: 0.0045
1/1	0s	35ms/step	- loss: 0.0038
1/1	0s	28ms/step	
1/1	0s	43ms/step	
1/1	0s	26ms/step	
1/1	0s	30ms/step	
1/1	0s	34ms/step	
1/1	0s	29ms/step	
1/1	0s	33ms/step	
1/1	0s	40ms/step	
1/1	0s	52ms/step	
1/1	0s	32ms/step	
1/1	0s	30ms/step	
1/1	0s	30ms/step	
1/1	0s	29ms/step	
1/1	0s	33ms/step	
1/1	0s	33ms/step	
1/1	0s	35ms/step	

```
1/1 ————— 0s 26ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 29ms/step - loss: 0.0026
1/1 ————— 0s 31ms/step - loss: 0.0030
1/1 ————— 0s 31ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 49ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 34ms/step - loss: 0.0037
1/1 ————— 0s 45ms/step - loss: 0.0036
1/1 ————— 0s 34ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 31ms/step - loss: 0.0031
1/1 ————— 0s 34ms/step - loss: 0.0035
Epoch: 066/149 | Loss: 0.0035 | Episodes: 316 | Win count: 3 | Win rate: 0.045 | time: 7.55 minutes
1/1 ————— 0s 33ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 28ms/step
```

1/1		0s	29ms/step	
1/1		0s	31ms/step	
1/1		0s	26ms/step	
1/1		0s	33ms/step	
1/1		0s	28ms/step	
1/1		0s	37ms/step	
1/1		0s	44ms/step	
1/1		0s	35ms/step	
1/1		0s	32ms/step	
1/1		0s	30ms/step	
1/1		0s	41ms/step	
1/1		0s	53ms/step	
1/1		0s	40ms/step	
1/1		0s	29ms/step	
1/1		0s	27ms/step	
1/1		0s	29ms/step	
1/1		0s	27ms/step	- loss: 0.0026
1/1		0s	28ms/step	- loss: 0.0027
1/1		0s	29ms/step	
1/1		0s	25ms/step	
1/1		0s	31ms/step	
1/1		0s	31ms/step	
1/1		0s	28ms/step	
1/1		0s	36ms/step	
1/1		0s	31ms/step	
1/1		0s	27ms/step	
1/1		0s	29ms/step	
1/1		0s	28ms/step	
1/1		0s	34ms/step	
1/1		0s	30ms/step	
1/1		0s	26ms/step	
1/1		0s	24ms/step	
1/1		0s	27ms/step	
1/1		0s	26ms/step	
1/1		0s	32ms/step	
1/1		0s	33ms/step	
1/1		0s	28ms/step	
1/1		0s	33ms/step	
1/1		0s	38ms/step	- loss: 0.0019
1/1		0s	34ms/step	- loss: 0.0019
1/1		0s	27ms/step	
1/1		0s	37ms/step	
1/1		0s	50ms/step	
1/1		0s	39ms/step	
1/1		0s	41ms/step	
1/1		0s	31ms/step	
1/1		0s	33ms/step	
1/1		0s	32ms/step	
1/1		0s	30ms/step	
1/1		0s	32ms/step	
1/1		0s	31ms/step	
1/1		0s	29ms/step	
1/1		0s	25ms/step	
1/1		0s	34ms/step	
1/1		0s	27ms/step	
1/1		0s	27ms/step	

```
1/1 ————— 0s 31ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 37ms/step - loss: 0.0021
1/1 ————— 0s 39ms/step - loss: 0.0024
1/1 ————— 0s 30ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 45ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 44ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 34ms/step - loss: 0.0036
1/1 ————— 0s 37ms/step - loss: 0.0038
1/1 ————— 0s 29ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 38ms/step - loss: 0.0062
1/1 ————— 0s 30ms/step - loss: 0.0055
Epoch: 067/149 | Loss: 0.0055 | Episodes: 321 | Win count: 3 | Win rate: 0.044 | time: 7.68 minutes
1/1 ————— 0s 29ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 28ms/step
```

1/1		0s	29ms/step	
1/1		0s	36ms/step	
1/1		0s	39ms/step	
1/1		0s	36ms/step	
1/1		0s	29ms/step	
1/1		0s	37ms/step	
1/1		0s	30ms/step	
1/1		0s	33ms/step	
1/1		0s	25ms/step	
1/1		0s	28ms/step	
1/1		0s	29ms/step	
1/1		0s	35ms/step	
1/1		0s	40ms/step	
1/1		0s	36ms/step	
1/1		0s	27ms/step	
1/1		0s	32ms/step	
1/1		0s	41ms/step	- loss: 0.0055
1/1		0s	43ms/step	- loss: 0.0047
1/1		0s	33ms/step	
1/1		0s	34ms/step	
1/1		0s	28ms/step	
1/1		0s	25ms/step	
1/1		0s	28ms/step	
1/1		0s	25ms/step	
1/1		0s	26ms/step	
1/1		0s	26ms/step	
1/1		0s	27ms/step	
1/1		0s	29ms/step	
1/1		0s	29ms/step	
1/1		0s	35ms/step	
1/1		0s	37ms/step	
1/1		0s	29ms/step	
1/1		0s	26ms/step	
1/1		0s	27ms/step	
1/1		0s	34ms/step	
1/1		0s	32ms/step	
1/1		0s	35ms/step	
1/1		0s	36ms/step	
1/1		0s	30ms/step	- loss: 0.0024
1/1		0s	31ms/step	- loss: 0.0021
1/1		0s	25ms/step	
1/1		0s	28ms/step	
1/1		0s	26ms/step	
1/1		0s	29ms/step	
1/1		0s	30ms/step	
1/1		0s	37ms/step	
1/1		0s	31ms/step	
1/1		0s	28ms/step	
1/1		0s	35ms/step	
1/1		0s	34ms/step	
1/1		0s	38ms/step	
1/1		0s	34ms/step	
1/1		0s	29ms/step	
1/1		0s	33ms/step	
1/1		0s	39ms/step	
1/1		0s	29ms/step	

1/1	0s	32ms/step	
1/1	0s	31ms/step	
1/1	0s	27ms/step	
1/1	0s	25ms/step	
1/1	0s	39ms/step	- loss: 0.0030
1/1	0s	34ms/step	- loss: 0.0032
1/1	0s	31ms/step	
1/1	0s	29ms/step	
1/1	0s	29ms/step	
1/1	0s	26ms/step	
1/1	0s	29ms/step	
1/1	0s	32ms/step	
1/1	0s	32ms/step	
1/1	0s	32ms/step	
1/1	0s	36ms/step	
1/1	0s	38ms/step	
1/1	0s	31ms/step	
1/1	0s	26ms/step	
1/1	0s	36ms/step	
1/1	0s	27ms/step	
1/1	0s	36ms/step	
1/1	0s	33ms/step	
1/1	0s	27ms/step	
1/1	0s	26ms/step	
1/1	0s	26ms/step	
1/1	0s	25ms/step	
1/1	0s	34ms/step	- loss: 0.0026
1/1	0s	34ms/step	- loss: 0.0027
1/1	0s	31ms/step	
1/1	0s	27ms/step	
1/1	0s	28ms/step	
1/1	0s	31ms/step	
1/1	0s	31ms/step	
1/1	0s	41ms/step	
1/1	0s	28ms/step	
1/1	0s	31ms/step	
1/1	0s	29ms/step	
1/1	0s	32ms/step	
1/1	0s	26ms/step	
1/1	0s	29ms/step	
1/1	0s	33ms/step	
1/1	0s	35ms/step	
1/1	0s	26ms/step	
1/1	0s	36ms/step	
1/1	0s	26ms/step	
1/1	0s	29ms/step	
1/1	0s	25ms/step	
1/1	0s	26ms/step	
1/1	0s	32ms/step	- loss: 0.0016
1/1	0s	32ms/step	- loss: 0.0021
1/1	0s	32ms/step	
1/1	0s	41ms/step	
1/1	0s	40ms/step	
1/1	0s	29ms/step	
1/1	0s	26ms/step	
1/1	0s	28ms/step	

1/1		0s	28ms/step	
1/1		0s	32ms/step	
1/1		0s	27ms/step	
1/1		0s	28ms/step	
1/1		0s	29ms/step	
1/1		0s	26ms/step	
1/1		0s	29ms/step	
1/1		0s	31ms/step	
1/1		0s	35ms/step	
1/1		0s	27ms/step	
1/1		0s	26ms/step	
1/1		0s	27ms/step	
1/1		0s	34ms/step	
1/1		0s	30ms/step	
1/1		0s	44ms/step	- loss: 0.0028
1/1		0s	29ms/step	- loss: 0.0031
1/1		0s	35ms/step	
1/1		0s	34ms/step	
1/1		0s	29ms/step	
1/1		0s	29ms/step	
1/1		0s	29ms/step	
1/1		0s	30ms/step	
1/1		0s	30ms/step	
1/1		0s	30ms/step	
1/1		0s	29ms/step	
1/1		0s	38ms/step	
1/1		0s	44ms/step	
1/1		0s	31ms/step	
1/1		0s	29ms/step	
1/1		0s	28ms/step	
1/1		0s	33ms/step	
1/1		0s	33ms/step	
1/1		0s	29ms/step	
1/1		0s	32ms/step	
1/1		0s	32ms/step	
1/1		0s	32ms/step	
1/1		0s	33ms/step	- loss: 0.0055
1/1		0s	51ms/step	- loss: 0.0047
1/1		0s	31ms/step	
1/1		0s	33ms/step	
1/1		0s	28ms/step	
1/1		0s	30ms/step	
1/1		0s	32ms/step	
1/1		0s	27ms/step	
1/1		0s	30ms/step	
1/1		0s	29ms/step	
1/1		0s	30ms/step	
1/1		0s	38ms/step	
1/1		0s	31ms/step	
1/1		0s	32ms/step	
1/1		0s	27ms/step	
1/1		0s	30ms/step	
1/1		0s	35ms/step	
1/1		0s	33ms/step	
1/1		0s	42ms/step	
1/1		0s	43ms/step	

```
1/1 ————— 0s 38ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 38ms/step - loss: 0.0029
1/1 ————— 0s 35ms/step - loss: 0.0028
1/1 ————— 0s 40ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 33ms/step - loss: 0.0035
1/1 ————— 0s 33ms/step - loss: 0.0031
1/1 ————— 0s 32ms/step
1/1 ————— 0s 42ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 35ms/step - loss: 0.0034
1/1 ————— 0s 34ms/step - loss: 0.0035
Epoch: 068/149 | Loss: 0.0035 | Episodes: 331 | Win count: 3 | Win rate: 0.043 | time: 7.93 minutes
1/1 ————— 0s 26ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 29ms/step
```

1/1		0s	29ms/step	
1/1		0s	37ms/step	
1/1		0s	29ms/step	
1/1		0s	25ms/step	
1/1		0s	28ms/step	
1/1		0s	30ms/step	
1/1		0s	30ms/step	
1/1		0s	35ms/step	
1/1		0s	35ms/step	
1/1		0s	28ms/step	
1/1		0s	27ms/step	
1/1		0s	38ms/step	
1/1		0s	27ms/step	
1/1		0s	29ms/step	
1/1		0s	35ms/step	- loss: 0.0059
1/1		0s	33ms/step	- loss: 0.0055
1/1		0s	27ms/step	
1/1		0s	28ms/step	
1/1		0s	28ms/step	
1/1		0s	32ms/step	
1/1		0s	29ms/step	
1/1		0s	29ms/step	
1/1		0s	38ms/step	
1/1		0s	28ms/step	
1/1		0s	26ms/step	
1/1		0s	38ms/step	
1/1		0s	28ms/step	
1/1		0s	28ms/step	
1/1		0s	26ms/step	
1/1		0s	28ms/step	
1/1		0s	41ms/step	
1/1		0s	29ms/step	
1/1		0s	34ms/step	
1/1		0s	31ms/step	
1/1		0s	29ms/step	
1/1		0s	29ms/step	
1/1		0s	31ms/step	- loss: 0.0030
1/1		0s	30ms/step	- loss: 0.0031
1/1		0s	29ms/step	
1/1		0s	30ms/step	
1/1		0s	27ms/step	
1/1		0s	33ms/step	
1/1		0s	39ms/step	
1/1		0s	48ms/step	
1/1		0s	32ms/step	
1/1		0s	35ms/step	
1/1		0s	29ms/step	
1/1		0s	30ms/step	
1/1		0s	27ms/step	
1/1		0s	27ms/step	
1/1		0s	32ms/step	
1/1		0s	29ms/step	
1/1		0s	36ms/step	
1/1		0s	26ms/step	
1/1		0s	33ms/step	
1/1		0s	28ms/step	

```
1/1 29ms/step
1/1 32ms/step
1/1 47ms/step - loss: 0.0389
1/1 41ms/step - loss: 0.0364
1/1 34ms/step
1/1 39ms/step
1/1 31ms/step
1/1 31ms/step
1/1 32ms/step
1/1 29ms/step
1/1 30ms/step
1/1 27ms/step
1/1 29ms/step
1/1 27ms/step
1/1 28ms/step
1/1 28ms/step
1/1 36ms/step
1/1 29ms/step
1/1 30ms/step
1/1 44ms/step
1/1 35ms/step
1/1 41ms/step
1/1 36ms/step
1/1 42ms/step
1/1 40ms/step - loss: 0.0029
1/1 48ms/step - loss: 0.0032
```

Epoch: 069/149 | Loss: 0.0032 | Episodes: 335 | Win count: 3 | Win rate: 0.043 | time: 8.03 minutes

```
1/1 30ms/step
1/1 33ms/step
1/1 34ms/step
1/1 32ms/step
1/1 34ms/step
1/1 35ms/step
1/1 39ms/step
1/1 34ms/step
1/1 31ms/step
1/1 33ms/step
1/1 31ms/step
1/1 37ms/step
1/1 31ms/step
1/1 29ms/step
1/1 32ms/step
1/1 28ms/step
1/1 29ms/step
1/1 32ms/step
1/1 36ms/step
1/1 41ms/step
1/1 38ms/step - loss: 0.0033
1/1 33ms/step - loss: 0.0040
```

Epoch: 070/149 | Loss: 0.0040 | Episodes: 336 | Win count: 4 | Win rate: 0.056 | time: 8.06 minutes

```
1/1 35ms/step
1/1 38ms/step
1/1 26ms/step
1/1 34ms/step
```

1/1	0s	31ms/step	
1/1	0s	46ms/step	
1/1	0s	35ms/step	
1/1	0s	27ms/step	
1/1	0s	28ms/step	
1/1	0s	31ms/step	
1/1	0s	38ms/step	
1/1	0s	32ms/step	
1/1	0s	29ms/step	
1/1	0s	28ms/step	
1/1	0s	29ms/step	
1/1	0s	33ms/step	
1/1	0s	28ms/step	
1/1	0s	32ms/step	
1/1	0s	35ms/step	
1/1	0s	29ms/step	
1/1	0s	28ms/step	- loss: 0.0032
1/1	0s	42ms/step	- loss: 0.0037
1/1	0s	33ms/step	
1/1	0s	36ms/step	
1/1	0s	41ms/step	
1/1	0s	37ms/step	
1/1	0s	30ms/step	
1/1	0s	32ms/step	
1/1	0s	39ms/step	
1/1	0s	32ms/step	
1/1	0s	32ms/step	
1/1	0s	30ms/step	
1/1	0s	30ms/step	
1/1	0s	30ms/step	
1/1	0s	34ms/step	
1/1	0s	28ms/step	
1/1	0s	42ms/step	
1/1	0s	27ms/step	
1/1	0s	47ms/step	
1/1	0s	38ms/step	
1/1	0s	43ms/step	
1/1	0s	35ms/step	
1/1	0s	29ms/step	- loss: 0.0026
1/1	0s	28ms/step	- loss: 0.0030
1/1	0s	29ms/step	
1/1	0s	35ms/step	
1/1	0s	28ms/step	
1/1	0s	26ms/step	
1/1	0s	29ms/step	
1/1	0s	32ms/step	
1/1	0s	34ms/step	
1/1	0s	24ms/step	
1/1	0s	52ms/step	
1/1	0s	26ms/step	
1/1	0s	29ms/step	
1/1	0s	25ms/step	
1/1	0s	37ms/step	
1/1	0s	34ms/step	
1/1	0s	36ms/step	
1/1	0s	31ms/step	

1/1	=====	0s	30ms/step	
1/1	=====	0s	29ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	26ms/step	
1/1	=====	0s	31ms/step	- loss: 0.0051
1/1	=====	0s	31ms/step	- loss: 0.0050
1/1	=====	0s	33ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	26ms/step	
1/1	=====	0s	26ms/step	
1/1	=====	0s	29ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	28ms/step	
1/1	=====	0s	42ms/step	
1/1	=====	0s	43ms/step	
1/1	=====	0s	30ms/step	
1/1	=====	0s	27ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	27ms/step	
1/1	=====	0s	30ms/step	
1/1	=====	0s	45ms/step	
1/1	=====	0s	37ms/step	
1/1	=====	0s	27ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	30ms/step	
1/1	=====	0s	30ms/step	- loss: 0.0056
1/1	=====	0s	36ms/step	- loss: 0.0054
1/1	=====	0s	40ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	28ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	30ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	43ms/step	
1/1	=====	0s	40ms/step	
1/1	=====	0s	26ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	28ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	38ms/step	
1/1	=====	0s	42ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	41ms/step	
1/1	=====	0s	29ms/step	
1/1	=====	0s	37ms/step	
1/1	=====	0s	48ms/step	- loss: 0.0054
1/1	=====	0s	32ms/step	- loss: 0.0042
1/1	=====	0s	34ms/step	
1/1	=====	0s	30ms/step	
1/1	=====	0s	30ms/step	
1/1	=====	0s	29ms/step	
1/1	=====	0s	29ms/step	
1/1	=====	0s	31ms/step	

```
1/1 ————— 0s 38ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 42ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 37ms/step - loss: 0.0043
1/1 ————— 0s 37ms/step - loss: 0.0043
1/1 ————— 0s 30ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 43ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 28ms/step - loss: 0.0037
1/1 ————— 0s 32ms/step - loss: 0.0034
Epoch: 071/149 | Loss: 0.0034 | Episodes: 343 | Win count: 4 | Win rate: 0.056 | time: 8.24 minutes
1/1 ————— 0s 27ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 32ms/step
```

1/1	=====	0s	40ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	27ms/step	
1/1	=====	0s	30ms/step	- loss: 0.0026
1/1	=====	0s	36ms/step	- loss: 0.0028
1/1	=====	0s	26ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	43ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	43ms/step	
1/1	=====	0s	29ms/step	
1/1	=====	0s	28ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	30ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	37ms/step	
1/1	=====	0s	27ms/step	
1/1	=====	0s	28ms/step	
1/1	=====	0s	36ms/step	
1/1	=====	0s	30ms/step	
1/1	=====	0s	36ms/step	
1/1	=====	0s	37ms/step	
1/1	=====	0s	30ms/step	- loss: 0.0030
1/1	=====	0s	31ms/step	- loss: 0.0029
1/1	=====	0s	31ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	41ms/step	
1/1	=====	0s	35ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	30ms/step	
1/1	=====	0s	29ms/step	
1/1	=====	0s	28ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	30ms/step	
1/1	=====	0s	41ms/step	
1/1	=====	0s	30ms/step	
1/1	=====	0s	36ms/step	
1/1	=====	0s	41ms/step	
1/1	=====	0s	35ms/step	
1/1	=====	0s	37ms/step	
1/1	=====	0s	30ms/step	
1/1	=====	0s	29ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	38ms/step	
1/1	=====	0s	34ms/step	- loss: 0.0010
1/1	=====	0s	31ms/step	- loss: 0.0011
1/1	=====	0s	28ms/step	
1/1	=====	0s	26ms/step	
1/1	=====	0s	29ms/step	
1/1	=====	0s	28ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	34ms/step	

1/1	0s	30ms/step	
1/1	0s	29ms/step	
1/1	0s	30ms/step	
1/1	0s	36ms/step	
1/1	0s	45ms/step	
1/1	0s	30ms/step	
1/1	0s	29ms/step	
1/1	0s	27ms/step	
1/1	0s	31ms/step	
1/1	0s	32ms/step	
1/1	0s	28ms/step	
1/1	0s	31ms/step	
1/1	0s	26ms/step	
1/1	0s	31ms/step	
1/1	0s	42ms/step	loss: 0.0031
1/1	0s	37ms/step	loss: 0.0033
1/1	0s	32ms/step	
1/1	0s	26ms/step	
1/1	0s	33ms/step	
1/1	0s	28ms/step	
1/1	0s	33ms/step	
1/1	0s	36ms/step	
1/1	0s	30ms/step	
1/1	0s	40ms/step	
1/1	0s	37ms/step	
1/1	0s	31ms/step	
1/1	0s	33ms/step	
1/1	0s	35ms/step	
1/1	0s	35ms/step	
1/1	0s	35ms/step	
1/1	0s	33ms/step	
1/1	0s	29ms/step	
1/1	0s	29ms/step	
1/1	0s	34ms/step	
1/1	0s	33ms/step	
1/1	0s	37ms/step	
1/1	0s	34ms/step	loss: 0.0316
1/1	0s	39ms/step	loss: 0.0305
1/1	0s	31ms/step	
1/1	0s	30ms/step	
1/1	0s	24ms/step	
1/1	0s	33ms/step	
1/1	0s	28ms/step	
1/1	0s	27ms/step	
1/1	0s	30ms/step	
1/1	0s	28ms/step	
1/1	0s	33ms/step	
1/1	0s	33ms/step	
1/1	0s	30ms/step	
1/1	0s	27ms/step	
1/1	0s	29ms/step	
1/1	0s	32ms/step	
1/1	0s	28ms/step	
1/1	0s	31ms/step	
1/1	0s	29ms/step	
1/1	0s	29ms/step	

```
1/1 ————— 0s 33ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 31ms/step - loss: 0.0043
1/1 ————— 0s 36ms/step - loss: 0.0048
1/1 ————— 0s 33ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 44ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 31ms/step - loss: 0.0029
1/1 ————— 0s 29ms/step - loss: 0.0029
1/1 ————— 0s 31ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 33ms/step - loss: 0.0058
1/1 ————— 0s 34ms/step - loss: 0.0058
Epoch: 072/149 | Loss: 0.0058 | Episodes: 351 | Win count: 4 | Win rate: 0.055 | time: 8.44 minutes
1/1 ————— 0s 28ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 34ms/step
```

1/1	0s	30ms/step	
1/1	0s	31ms/step	
1/1	0s	45ms/step	
1/1	0s	35ms/step	
1/1	0s	27ms/step	
1/1	0s	29ms/step	
1/1	0s	31ms/step	
1/1	0s	28ms/step	
1/1	0s	28ms/step	
1/1	0s	27ms/step	
1/1	0s	37ms/step	
1/1	0s	35ms/step	
1/1	0s	27ms/step	
1/1	0s	33ms/step	
1/1	0s	42ms/step	loss: 0.0291
1/1	0s	36ms/step	loss: 0.0286
1/1	0s	28ms/step	
1/1	0s	35ms/step	
1/1	0s	29ms/step	
1/1	0s	40ms/step	
1/1	0s	37ms/step	
1/1	0s	35ms/step	
1/1	0s	32ms/step	
1/1	0s	34ms/step	
1/1	0s	37ms/step	
1/1	0s	33ms/step	
1/1	0s	32ms/step	
1/1	0s	33ms/step	
1/1	0s	32ms/step	
1/1	0s	29ms/step	
1/1	0s	33ms/step	
1/1	0s	32ms/step	
1/1	0s	50ms/step	
1/1	0s	47ms/step	
1/1	0s	34ms/step	
1/1	0s	38ms/step	
1/1	0s	44ms/step	loss: 0.0043
1/1	0s	28ms/step	loss: 0.0043
1/1	0s	27ms/step	
1/1	0s	26ms/step	
1/1	0s	31ms/step	
1/1	0s	28ms/step	
1/1	0s	36ms/step	
1/1	0s	29ms/step	
1/1	0s	29ms/step	
1/1	0s	25ms/step	
1/1	0s	31ms/step	
1/1	0s	31ms/step	
1/1	0s	37ms/step	
1/1	0s	31ms/step	
1/1	0s	31ms/step	
1/1	0s	29ms/step	
1/1	0s	29ms/step	
1/1	0s	31ms/step	
1/1	0s	28ms/step	
1/1	0s	32ms/step	

```
1/1 ————— 0s 29ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 36ms/step - loss: 0.0061
1/1 ————— 0s 35ms/step - loss: 0.0058
Epoch: 073/149 | Loss: 0.0058 | Episodes: 354 | Win count: 4 | Win rate: 0.054 | time: 8.52 minutes
1/1 ————— 0s 30ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 45ms/step - loss: 0.0035
1/1 ————— 0s 45ms/step - loss: 0.0033
1/1 ————— 0s 37ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 51ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 31ms/step - loss: 0.0034
1/1 ————— 0s 29ms/step - loss: 0.0031
1/1 ————— 0s 29ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 31ms/step
```

```
1/1 ————— 0s 26ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 43ms/step
1/1 ————— 0s 47ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 36ms/step - loss: 0.0032
1/1 ————— 0s 32ms/step - loss: 0.0030
1/1 ————— 0s 23ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 43ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 31ms/step - loss: 0.0037
1/1 ————— 0s 35ms/step - loss: 0.0033
Epoch: 074/149 | Loss: 0.0033 | Episodes: 358 | Win count: 4 | Win rate: 0.053 | time: 8.62 minutes
1/1 ————— 0s 32ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 38ms/step
```

1/1	=====	0s	26ms/step	
1/1	=====	0s	26ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	29ms/step	
1/1	=====	0s	34ms/step	- loss: 0.0023
1/1	=====	0s	35ms/step	- loss: 0.0024
1/1	=====	0s	31ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	26ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	36ms/step	
1/1	=====	0s	29ms/step	
1/1	=====	0s	29ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	28ms/step	
1/1	=====	0s	29ms/step	
1/1	=====	0s	27ms/step	
1/1	=====	0s	28ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	36ms/step	
1/1	=====	0s	39ms/step	
1/1	=====	0s	38ms/step	
1/1	=====	0s	28ms/step	
1/1	=====	0s	29ms/step	
1/1	=====	0s	34ms/step	- loss: 0.0019
1/1	=====	0s	32ms/step	- loss: 0.0022
1/1	=====	0s	28ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	30ms/step	
1/1	=====	0s	29ms/step	
1/1	=====	0s	35ms/step	
1/1	=====	0s	29ms/step	
1/1	=====	0s	36ms/step	
1/1	=====	0s	41ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	43ms/step	
1/1	=====	0s	28ms/step	
1/1	=====	0s	27ms/step	
1/1	=====	0s	39ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	28ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	30ms/step	
1/1	=====	0s	29ms/step	
1/1	=====	0s	29ms/step	
1/1	=====	0s	35ms/step	- loss: 0.0034
1/1	=====	0s	40ms/step	- loss: 0.0035
1/1	=====	0s	40ms/step	
1/1	=====	0s	28ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	28ms/step	
1/1	=====	0s	33ms/step	

1/1		0s	35ms/step	
1/1		0s	36ms/step	
1/1		0s	35ms/step	
1/1		0s	37ms/step	
1/1		0s	29ms/step	
1/1		0s	28ms/step	
1/1		0s	38ms/step	
1/1		0s	40ms/step	
1/1		0s	47ms/step	
1/1		0s	31ms/step	
1/1		0s	32ms/step	
1/1		0s	31ms/step	
1/1		0s	30ms/step	
1/1		0s	43ms/step	
1/1		0s	36ms/step	- loss: 0.0024
1/1		0s	54ms/step	- loss: 0.0024
1/1		0s	37ms/step	
1/1		0s	41ms/step	
1/1		0s	34ms/step	
1/1		0s	31ms/step	
1/1		0s	36ms/step	
1/1		0s	32ms/step	
1/1		0s	28ms/step	
1/1		0s	39ms/step	
1/1		0s	40ms/step	
1/1		0s	29ms/step	
1/1		0s	44ms/step	
1/1		0s	33ms/step	
1/1		0s	27ms/step	
1/1		0s	30ms/step	
1/1		0s	31ms/step	
1/1		0s	40ms/step	
1/1		0s	37ms/step	
1/1		0s	36ms/step	
1/1		0s	32ms/step	
1/1		0s	34ms/step	
1/1		0s	31ms/step	- loss: 0.0024
1/1		0s	37ms/step	- loss: 0.0024
1/1		0s	33ms/step	
1/1		0s	38ms/step	
1/1		0s	38ms/step	
1/1		0s	33ms/step	
1/1		0s	41ms/step	
1/1		0s	37ms/step	
1/1		0s	41ms/step	
1/1		0s	38ms/step	
1/1		0s	29ms/step	
1/1		0s	34ms/step	
1/1		0s	31ms/step	
1/1		0s	40ms/step	
1/1		0s	34ms/step	
1/1		0s	34ms/step	
1/1		0s	27ms/step	
1/1		0s	29ms/step	
1/1		0s	31ms/step	
1/1		0s	29ms/step	

```
1/1 ————— 0s 32ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 34ms/step - loss: 0.0021
1/1 ————— 0s 34ms/step - loss: 0.0021
1/1 ————— 0s 36ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 33ms/step - loss: 0.0022
1/1 ————— 0s 38ms/step - loss: 0.0022
Epoch: 075/149 | Loss: 0.0022 | Episodes: 365 | Win count: 4 | Win rate: 0.053 | time: 8.80 minutes
1/1 ————— 0s 40ms/step
1/1 ————— 0s 46ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 47ms/step
1/1 ————— 0s 45ms/step - loss: 0.0030
1/1 ————— 0s 40ms/step - loss: 0.0030
1/1 ————— 0s 32ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 28ms/step
```



```
1/1 ————— 0s 31ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 48ms/step
1/1 ————— 0s 43ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 44ms/step - loss: 0.0338
1/1 ————— 0s 38ms/step - loss: 0.0328
1/1 ————— 0s 29ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 32ms/step - loss: 0.0023
1/1 ————— 0s 33ms/step - loss: 0.0022
Epoch: 076/149 | Loss: 0.0022 | Episodes: 368 | Win count: 4 | Win rate: 0.052 | time: 8.88 minutes
1/1 ————— 0s 29ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 47ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 27ms/step
```

1/1	0s	28ms/step	
1/1	0s	37ms/step	
1/1	0s	32ms/step	
1/1	0s	32ms/step	
1/1	0s	36ms/step	- loss: 0.0031
1/1	0s	31ms/step	- loss: 0.0032
1/1	0s	31ms/step	
1/1	0s	29ms/step	
1/1	0s	39ms/step	
1/1	0s	30ms/step	
1/1	0s	29ms/step	
1/1	0s	32ms/step	
1/1	0s	35ms/step	
1/1	0s	33ms/step	
1/1	0s	30ms/step	
1/1	0s	25ms/step	
1/1	0s	31ms/step	
1/1	0s	31ms/step	
1/1	0s	34ms/step	
1/1	0s	30ms/step	
1/1	0s	30ms/step	
1/1	0s	26ms/step	
1/1	0s	33ms/step	
1/1	0s	29ms/step	
1/1	0s	29ms/step	
1/1	0s	32ms/step	
1/1	0s	37ms/step	- loss: 0.0025
1/1	0s	41ms/step	- loss: 0.0024
1/1	0s	24ms/step	
1/1	0s	26ms/step	
1/1	0s	30ms/step	
1/1	0s	30ms/step	
1/1	0s	29ms/step	
1/1	0s	42ms/step	
1/1	0s	31ms/step	
1/1	0s	30ms/step	
1/1	0s	30ms/step	
1/1	0s	35ms/step	
1/1	0s	31ms/step	
1/1	0s	31ms/step	
1/1	0s	35ms/step	
1/1	0s	30ms/step	
1/1	0s	24ms/step	
1/1	0s	29ms/step	
1/1	0s	27ms/step	
1/1	0s	35ms/step	
1/1	0s	34ms/step	
1/1	0s	36ms/step	
1/1	0s	51ms/step	- loss: 0.0027
1/1	0s	33ms/step	- loss: 0.0026
1/1	0s	35ms/step	
1/1	0s	26ms/step	
1/1	0s	29ms/step	
1/1	0s	26ms/step	
1/1	0s	35ms/step	
1/1	0s	32ms/step	

```
1/1 ————— 0s 29ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 28ms/step - loss: 0.0046
1/1 ————— 0s 35ms/step - loss: 0.0046
Epoch: 077/149 | Loss: 0.0046 | Episodes: 372 | Win count: 4 | Win rate: 0.051 | time: 8.98 minutes
1/1 ————— 0s 37ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 42ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 32ms/step - loss: 0.0028
1/1 ————— 0s 44ms/step - loss: 0.0028
1/1 ————— 0s 50ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 29ms/step
```

```
1/1 ————— 0s 29ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 32ms/step - loss: 0.0018
1/1 ————— 0s 28ms/step - loss: 0.0017
1/1 ————— 0s 37ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 34ms/step - loss: 0.0046
1/1 ————— 0s 35ms/step - loss: 0.0045
Epoch: 078/149 | Loss: 0.0045 | Episodes: 375 | Win count: 4 | Win rate: 0.051 | time: 9.06 minutes
1/1 ————— 0s 30ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 47ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 42ms/step
1/1 ————— 0s 37ms/step - loss: 0.0296
1/1 ————— 0s 37ms/step - loss: 0.0291
1/1 ————— 0s 28ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 33ms/step
```

1/1		0s	27ms/step	
1/1		0s	28ms/step	
1/1		0s	31ms/step	
1/1		0s	31ms/step	
1/1		0s	36ms/step	
1/1		0s	30ms/step	
1/1		0s	31ms/step	
1/1		0s	31ms/step	
1/1		0s	29ms/step	
1/1		0s	32ms/step	
1/1		0s	45ms/step	
1/1		0s	37ms/step	
1/1		0s	35ms/step	
1/1		0s	37ms/step	
1/1		0s	37ms/step	
1/1		0s	37ms/step	
1/1		0s	52ms/step	- loss: 0.0034
1/1		0s	31ms/step	- loss: 0.0035
1/1		0s	29ms/step	
1/1		0s	32ms/step	
1/1		0s	32ms/step	
1/1		0s	30ms/step	
1/1		0s	25ms/step	
1/1		0s	31ms/step	
1/1		0s	32ms/step	
1/1		0s	34ms/step	
1/1		0s	38ms/step	
1/1		0s	36ms/step	
1/1		0s	37ms/step	
1/1		0s	29ms/step	
1/1		0s	31ms/step	
1/1		0s	29ms/step	
1/1		0s	34ms/step	
1/1		0s	32ms/step	
1/1		0s	32ms/step	
1/1		0s	31ms/step	
1/1		0s	30ms/step	
1/1		0s	32ms/step	
1/1		0s	33ms/step	- loss: 0.0368
1/1		0s	31ms/step	- loss: 0.0351
1/1		0s	28ms/step	
1/1		0s	31ms/step	
1/1		0s	25ms/step	
1/1		0s	38ms/step	
1/1		0s	33ms/step	
1/1		0s	41ms/step	
1/1		0s	32ms/step	
1/1		0s	40ms/step	
1/1		0s	37ms/step	
1/1		0s	39ms/step	
1/1		0s	35ms/step	
1/1		0s	32ms/step	
1/1		0s	26ms/step	
1/1		0s	31ms/step	
1/1		0s	31ms/step	
1/1		0s	29ms/step	

1/1	0s	28ms/step	
1/1	0s	30ms/step	
1/1	0s	32ms/step	
1/1	0s	28ms/step	
1/1	0s	44ms/step	- loss: 0.0307
1/1	0s	39ms/step	- loss: 0.0301
1/1	0s	31ms/step	
1/1	0s	30ms/step	
1/1	0s	37ms/step	
1/1	0s	29ms/step	
1/1	0s	36ms/step	
1/1	0s	33ms/step	
1/1	0s	32ms/step	
1/1	0s	30ms/step	
1/1	0s	29ms/step	
1/1	0s	28ms/step	
1/1	0s	47ms/step	
1/1	0s	46ms/step	
1/1	0s	31ms/step	
1/1	0s	41ms/step	
1/1	0s	35ms/step	
1/1	0s	39ms/step	
1/1	0s	32ms/step	
1/1	0s	28ms/step	
1/1	0s	29ms/step	
1/1	0s	28ms/step	
1/1	0s	33ms/step	- loss: 0.0037
1/1	0s	33ms/step	- loss: 0.0038
1/1	0s	28ms/step	
1/1	0s	34ms/step	
1/1	0s	40ms/step	
1/1	0s	36ms/step	
1/1	0s	34ms/step	
1/1	0s	33ms/step	
1/1	0s	48ms/step	
1/1	0s	58ms/step	
1/1	0s	37ms/step	
1/1	0s	30ms/step	
1/1	0s	28ms/step	
1/1	0s	29ms/step	
1/1	0s	31ms/step	
1/1	0s	33ms/step	
1/1	0s	30ms/step	
1/1	0s	30ms/step	
1/1	0s	29ms/step	
1/1	0s	25ms/step	
1/1	0s	26ms/step	
1/1	0s	32ms/step	
1/1	0s	38ms/step	- loss: 0.0028
1/1	0s	42ms/step	- loss: 0.0030
1/1	0s	26ms/step	
1/1	0s	33ms/step	
1/1	0s	33ms/step	
1/1	0s	33ms/step	
1/1	0s	35ms/step	
1/1	0s	37ms/step	

```
1/1 ————— 0s 31ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 44ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 40ms/step - loss: 0.0029
1/1 ————— 0s 39ms/step - loss: 0.0030
1/1 ————— 0s 35ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 44ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 33ms/step - loss: 0.0024
1/1 ————— 0s 32ms/step - loss: 0.0024
Epoch: 079/149 | Loss: 0.0024 | Episodes: 383 | Win count: 4 | Win rate: 0.050 | time: 9.27 minutes
1/1 ————— 0s 35ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 47ms/step
1/1 ————— 0s 49ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 29ms/step
```

1/1	=====	0s	30ms/step	
1/1	=====	0s	27ms/step	
1/1	=====	0s	27ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	29ms/step	- loss: 0.0027
1/1	=====	0s	29ms/step	- loss: 0.0027
1/1	=====	0s	29ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	27ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	38ms/step	
1/1	=====	0s	30ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	26ms/step	
1/1	=====	0s	27ms/step	
1/1	=====	0s	35ms/step	
1/1	=====	0s	30ms/step	
1/1	=====	0s	26ms/step	
1/1	=====	0s	26ms/step	
1/1	=====	0s	30ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	26ms/step	
1/1	=====	0s	36ms/step	- loss: 0.0310
1/1	=====	0s	35ms/step	- loss: 0.0300
1/1	=====	0s	28ms/step	
1/1	=====	0s	28ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	40ms/step	
1/1	=====	0s	30ms/step	
1/1	=====	0s	26ms/step	
1/1	=====	0s	27ms/step	
1/1	=====	0s	30ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	26ms/step	
1/1	=====	0s	27ms/step	
1/1	=====	0s	25ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	28ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	37ms/step	- loss: 0.0024
1/1	=====	0s	37ms/step	- loss: 0.0024
1/1	=====	0s	31ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	30ms/step	
1/1	=====	0s	40ms/step	
1/1	=====	0s	29ms/step	
1/1	=====	0s	38ms/step	

1/1		0s	59ms/step	
1/1		0s	33ms/step	
1/1		0s	32ms/step	
1/1		0s	28ms/step	
1/1		0s	34ms/step	
1/1		0s	30ms/step	
1/1		0s	32ms/step	
1/1		0s	28ms/step	
1/1		0s	30ms/step	
1/1		0s	35ms/step	
1/1		0s	31ms/step	
1/1		0s	26ms/step	
1/1		0s	28ms/step	
1/1		0s	29ms/step	
1/1		0s	52ms/step	- loss: 0.0047
1/1		0s	30ms/step	- loss: 0.0047
1/1		0s	29ms/step	
1/1		0s	30ms/step	
1/1		0s	36ms/step	
1/1		0s	32ms/step	
1/1		0s	34ms/step	
1/1		0s	27ms/step	
1/1		0s	26ms/step	
1/1		0s	33ms/step	
1/1		0s	30ms/step	
1/1		0s	29ms/step	
1/1		0s	42ms/step	
1/1		0s	37ms/step	
1/1		0s	30ms/step	
1/1		0s	30ms/step	
1/1		0s	28ms/step	
1/1		0s	32ms/step	
1/1		0s	32ms/step	
1/1		0s	26ms/step	
1/1		0s	31ms/step	
1/1		0s	30ms/step	
1/1		0s	32ms/step	- loss: 0.0061
1/1		0s	31ms/step	- loss: 0.0058
1/1		0s	31ms/step	
1/1		0s	28ms/step	
1/1		0s	38ms/step	
1/1		0s	27ms/step	
1/1		0s	30ms/step	
1/1		0s	29ms/step	
1/1		0s	38ms/step	
1/1		0s	45ms/step	
1/1		0s	35ms/step	
1/1		0s	34ms/step	
1/1		0s	30ms/step	
1/1		0s	34ms/step	
1/1		0s	30ms/step	
1/1		0s	31ms/step	
1/1		0s	28ms/step	
1/1		0s	28ms/step	
1/1		0s	30ms/step	
1/1		0s	30ms/step	

```
1/1 ————— 0s 26ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 39ms/step - loss: 0.0042
1/1 ————— 0s 32ms/step - loss: 0.0038
1/1 ————— 0s 36ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 43ms/step
1/1 ————— 0s 46ms/step - loss: 0.0052
1/1 ————— 0s 35ms/step - loss: 0.0046
Epoch: 080/149 | Loss: 0.0046 | Episodes: 390 | Win count: 4 | Win rate: 0.049 | time: 9.45 minutes
1/1 ————— 0s 30ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 30ms/step - loss: 0.0035
1/1 ————— 0s 30ms/step - loss: 0.0033
1/1 ————— 0s 26ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 30ms/step
```

1/1	0s	27ms/step	
1/1	0s	27ms/step	
1/1	0s	23ms/step	
1/1	0s	40ms/step	
1/1	0s	31ms/step	
1/1	0s	41ms/step	
1/1	0s	33ms/step	
1/1	0s	30ms/step	
1/1	0s	33ms/step	
1/1	0s	34ms/step	
1/1	0s	30ms/step	
1/1	0s	40ms/step	
1/1	0s	38ms/step	
1/1	0s	26ms/step	
1/1	0s	34ms/step	- loss: 0.0029
1/1	0s	30ms/step	- loss: 0.0028
1/1	0s	30ms/step	
1/1	0s	29ms/step	
1/1	0s	32ms/step	
1/1	0s	27ms/step	
1/1	0s	35ms/step	
1/1	0s	32ms/step	
1/1	0s	44ms/step	
1/1	0s	32ms/step	
1/1	0s	32ms/step	
1/1	0s	31ms/step	
1/1	0s	31ms/step	
1/1	0s	28ms/step	
1/1	0s	29ms/step	
1/1	0s	27ms/step	
1/1	0s	30ms/step	
1/1	0s	27ms/step	
1/1	0s	31ms/step	
1/1	0s	30ms/step	
1/1	0s	31ms/step	
1/1	0s	32ms/step	
1/1	0s	35ms/step	- loss: 0.0322
1/1	0s	48ms/step	- loss: 0.0321
1/1	0s	38ms/step	
1/1	0s	36ms/step	
1/1	0s	38ms/step	
1/1	0s	39ms/step	
1/1	0s	28ms/step	
1/1	0s	33ms/step	
1/1	0s	28ms/step	
1/1	0s	29ms/step	
1/1	0s	39ms/step	
1/1	0s	46ms/step	
1/1	0s	32ms/step	
1/1	0s	41ms/step	
1/1	0s	28ms/step	
1/1	0s	36ms/step	
1/1	0s	46ms/step	
1/1	0s	32ms/step	
1/1	0s	36ms/step	
1/1	0s	34ms/step	

```
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 31ms/step - loss: 0.0032
1/1 ██████████ 0s 34ms/step - loss: 0.0032
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 43ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 27ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 40ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 40ms/step
1/1 ██████████ 0s 27ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 28ms/step - loss: 0.0032
1/1 ██████████ 0s 36ms/step - loss: 0.0032
Epoch: 081/149 | Loss: 0.0032 | Episodes: 395 | Win count: 4 | Win rate: 0.049 | time: 9.58 minutes
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 27ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 27ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 26ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 27ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 26ms/step
1/1 ██████████ 0s 25ms/step
1/1 ██████████ 0s 27ms/step
1/1 ██████████ 0s 25ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 36ms/step - loss: 0.0027
1/1 ██████████ 0s 33ms/step - loss: 0.0027
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 43ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 30ms/step
```

1/1	0s	33ms/step	
1/1	0s	40ms/step	
1/1	0s	31ms/step	
1/1	0s	40ms/step	
1/1	0s	29ms/step	
1/1	0s	34ms/step	
1/1	0s	38ms/step	
1/1	0s	40ms/step	
1/1	0s	34ms/step	
1/1	0s	60ms/step	
1/1	0s	41ms/step	
1/1	0s	39ms/step	
1/1	0s	46ms/step	
1/1	0s	38ms/step	
1/1	0s	44ms/step	- loss: 0.0027
1/1	0s	35ms/step	- loss: 0.0024
1/1	0s	37ms/step	
1/1	0s	34ms/step	
1/1	0s	33ms/step	
1/1	0s	33ms/step	
1/1	0s	33ms/step	
1/1	0s	36ms/step	
1/1	0s	29ms/step	
1/1	0s	27ms/step	
1/1	0s	27ms/step	
1/1	0s	37ms/step	
1/1	0s	28ms/step	
1/1	0s	34ms/step	
1/1	0s	31ms/step	
1/1	0s	36ms/step	
1/1	0s	35ms/step	
1/1	0s	28ms/step	
1/1	0s	28ms/step	
1/1	0s	28ms/step	
1/1	0s	27ms/step	
1/1	0s	42ms/step	
1/1	0s	45ms/step	- loss: 0.0035
1/1	0s	35ms/step	- loss: 0.0031
1/1	0s	27ms/step	
1/1	0s	33ms/step	
1/1	0s	34ms/step	
1/1	0s	40ms/step	
1/1	0s	31ms/step	
1/1	0s	28ms/step	
1/1	0s	29ms/step	
1/1	0s	32ms/step	
1/1	0s	29ms/step	
1/1	0s	32ms/step	
1/1	0s	27ms/step	
1/1	0s	39ms/step	
1/1	0s	40ms/step	
1/1	0s	30ms/step	
1/1	0s	29ms/step	
1/1	0s	27ms/step	
1/1	0s	31ms/step	
1/1	0s	31ms/step	

```
1/1 0s 30ms/step
1/1 0s 29ms/step
1/1 0s 32ms/step - loss: 0.0036
1/1 0s 32ms/step - loss: 0.0036
1/1 0s 28ms/step
1/1 0s 30ms/step
1/1 0s 32ms/step
1/1 0s 39ms/step
1/1 0s 34ms/step
1/1 0s 29ms/step
1/1 0s 35ms/step
1/1 0s 31ms/step
1/1 0s 35ms/step
1/1 0s 26ms/step
1/1 0s 35ms/step
1/1 0s 34ms/step
1/1 0s 28ms/step
1/1 0s 31ms/step
1/1 0s 34ms/step
1/1 0s 34ms/step
1/1 0s 37ms/step
1/1 0s 31ms/step
1/1 0s 33ms/step
1/1 0s 37ms/step
1/1 0s 43ms/step - loss: 0.0030
1/1 0s 49ms/step - loss: 0.0027
1/1 0s 28ms/step
1/1 0s 42ms/step
1/1 0s 31ms/step
1/1 0s 34ms/step
1/1 0s 30ms/step
1/1 0s 28ms/step
1/1 0s 42ms/step
1/1 0s 34ms/step
1/1 0s 27ms/step
1/1 0s 34ms/step
1/1 0s 31ms/step
1/1 0s 54ms/step
1/1 0s 33ms/step
1/1 0s 29ms/step
1/1 0s 38ms/step
1/1 0s 37ms/step
1/1 0s 36ms/step
1/1 0s 26ms/step
1/1 0s 30ms/step
1/1 0s 35ms/step
1/1 0s 45ms/step - loss: 0.0033
1/1 0s 35ms/step - loss: 0.0032
1/1 0s 44ms/step
1/1 0s 37ms/step
1/1 0s 42ms/step
1/1 0s 32ms/step
1/1 0s 27ms/step
1/1 0s 33ms/step
1/1 0s 31ms/step
1/1 0s 34ms/step
```

```
1/1 0s 41ms/step
1/1 0s 33ms/step
1/1 0s 34ms/step
1/1 0s 33ms/step
1/1 0s 31ms/step
1/1 0s 28ms/step
1/1 0s 34ms/step
1/1 0s 31ms/step
1/1 0s 28ms/step
1/1 0s 42ms/step
1/1 0s 30ms/step
1/1 0s 29ms/step
1/1 0s 32ms/step - loss: 0.0034
1/1 0s 28ms/step - loss: 0.0037
1/1 0s 32ms/step
1/1 0s 31ms/step
1/1 0s 27ms/step
1/1 0s 29ms/step
1/1 0s 33ms/step
1/1 0s 36ms/step
1/1 0s 29ms/step
1/1 0s 29ms/step
1/1 0s 30ms/step
1/1 0s 38ms/step
1/1 0s 31ms/step
1/1 0s 31ms/step
1/1 0s 29ms/step
1/1 0s 30ms/step
1/1 0s 32ms/step
1/1 0s 34ms/step
1/1 0s 32ms/step
1/1 0s 30ms/step
1/1 0s 32ms/step
1/1 0s 32ms/step
1/1 0s 34ms/step - loss: 0.0030
1/1 0s 41ms/step - loss: 0.0030
Epoch: 082/149 | Loss: 0.0030 | Episodes: 403 | Win count: 4 | Win rate: 0.048 | time: 9.78 minutes
1/1 0s 32ms/step
1/1 0s 27ms/step
1/1 0s 30ms/step
1/1 0s 33ms/step
1/1 0s 31ms/step
1/1 0s 27ms/step
1/1 0s 29ms/step
1/1 0s 28ms/step
1/1 0s 28ms/step
1/1 0s 30ms/step
1/1 0s 31ms/step
1/1 0s 32ms/step
1/1 0s 30ms/step
1/1 0s 37ms/step
1/1 0s 29ms/step
1/1 0s 27ms/step
1/1 0s 29ms/step
1/1 0s 48ms/step
```

1/1	0s	38ms/step	
1/1	0s	31ms/step	
1/1	0s	36ms/step	- loss: 0.0028
1/1	0s	32ms/step	- loss: 0.0027
1/1	0s	29ms/step	
1/1	0s	27ms/step	
1/1	0s	31ms/step	
1/1	0s	26ms/step	
1/1	0s	29ms/step	
1/1	0s	40ms/step	
1/1	0s	30ms/step	
1/1	0s	35ms/step	
1/1	0s	37ms/step	
1/1	0s	33ms/step	
1/1	0s	31ms/step	
1/1	0s	25ms/step	
1/1	0s	27ms/step	
1/1	0s	37ms/step	
1/1	0s	32ms/step	
1/1	0s	28ms/step	
1/1	0s	35ms/step	
1/1	0s	27ms/step	
1/1	0s	30ms/step	
1/1	0s	44ms/step	
1/1	0s	35ms/step	- loss: 0.0355
1/1	0s	36ms/step	- loss: 0.0353
1/1	0s	31ms/step	
1/1	0s	30ms/step	
1/1	0s	34ms/step	
1/1	0s	52ms/step	
1/1	0s	40ms/step	
1/1	0s	34ms/step	
1/1	0s	28ms/step	
1/1	0s	31ms/step	
1/1	0s	33ms/step	
1/1	0s	39ms/step	
1/1	0s	29ms/step	
1/1	0s	30ms/step	
1/1	0s	34ms/step	
1/1	0s	30ms/step	
1/1	0s	34ms/step	
1/1	0s	40ms/step	
1/1	0s	41ms/step	
1/1	0s	45ms/step	
1/1	0s	40ms/step	
1/1	0s	33ms/step	
1/1	0s	33ms/step	- loss: 0.0042
1/1	0s	34ms/step	- loss: 0.0040
1/1	0s	28ms/step	
1/1	0s	33ms/step	
1/1	0s	37ms/step	
1/1	0s	38ms/step	
1/1	0s	32ms/step	
1/1	0s	34ms/step	
1/1	0s	28ms/step	
1/1	0s	31ms/step	


```
1/1 ██████████ 0s 26ms/step
1/1 ██████████ 0s 25ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 27ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 27ms/step
1/1 ██████████ 0s 27ms/step
1/1 ██████████ 0s 27ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 27ms/step
1/1 ██████████ 0s 32ms/step - loss: 0.0026
1/1 ██████████ 0s 41ms/step - loss: 0.0025
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 27ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 40ms/step
1/1 ██████████ 0s 43ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 38ms/step - loss: 0.0014
1/1 ██████████ 0s 39ms/step - loss: 0.0012
Epoch: 083/149 | Loss: 0.0012 | Episodes: 408 | Win count: 4 | Win rate: 0.048 | time: 9.91 minutes
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 25ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 27ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 27ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 26ms/step
1/1 ██████████ 0s 29ms/step
```

1/1	<div></div>	0s	40ms/step	
1/1	<div></div>	0s	45ms/step	
1/1	<div></div>	0s	35ms/step	- loss: 0.0020
1/1	<div></div>	0s	56ms/step	- loss: 0.0020
1/1	<div></div>	0s	30ms/step	
1/1	<div></div>	0s	32ms/step	
1/1	<div></div>	0s	41ms/step	
1/1	<div></div>	0s	33ms/step	
1/1	<div></div>	0s	44ms/step	
1/1	<div></div>	0s	42ms/step	
1/1	<div></div>	0s	36ms/step	
1/1	<div></div>	0s	24ms/step	
1/1	<div></div>	0s	34ms/step	
1/1	<div></div>	0s	32ms/step	
1/1	<div></div>	0s	32ms/step	
1/1	<div></div>	0s	31ms/step	
1/1	<div></div>	0s	49ms/step	
1/1	<div></div>	0s	36ms/step	
1/1	<div></div>	0s	31ms/step	
1/1	<div></div>	0s	39ms/step	
1/1	<div></div>	0s	34ms/step	
1/1	<div></div>	0s	28ms/step	
1/1	<div></div>	0s	33ms/step	
1/1	<div></div>	0s	32ms/step	
1/1	<div></div>	0s	36ms/step	- loss: 0.0312
1/1	<div></div>	0s	41ms/step	- loss: 0.0296
1/1	<div></div>	0s	34ms/step	
1/1	<div></div>	0s	29ms/step	
1/1	<div></div>	0s	36ms/step	
1/1	<div></div>	0s	26ms/step	
1/1	<div></div>	0s	43ms/step	
1/1	<div></div>	0s	31ms/step	
1/1	<div></div>	0s	35ms/step	
1/1	<div></div>	0s	37ms/step	
1/1	<div></div>	0s	27ms/step	
1/1	<div></div>	0s	28ms/step	
1/1	<div></div>	0s	31ms/step	
1/1	<div></div>	0s	30ms/step	
1/1	<div></div>	0s	35ms/step	
1/1	<div></div>	0s	30ms/step	
1/1	<div></div>	0s	28ms/step	
1/1	<div></div>	0s	31ms/step	
1/1	<div></div>	0s	37ms/step	
1/1	<div></div>	0s	33ms/step	
1/1	<div></div>	0s	35ms/step	
1/1	<div></div>	0s	32ms/step	
1/1	<div></div>	0s	35ms/step	- loss: 0.0029
1/1	<div></div>	0s	45ms/step	- loss: 0.0035
1/1	<div></div>	0s	32ms/step	
1/1	<div></div>	0s	33ms/step	
1/1	<div></div>	0s	34ms/step	
1/1	<div></div>	0s	30ms/step	
1/1	<div></div>	0s	33ms/step	
1/1	<div></div>	0s	30ms/step	
1/1	<div></div>	0s	28ms/step	
1/1	<div></div>	0s	33ms/step	

1/1	<div></div>	0s	47ms/step	
1/1	<div></div>	0s	31ms/step	
1/1	<div></div>	0s	35ms/step	
1/1	<div></div>	0s	51ms/step	
1/1	<div></div>	0s	33ms/step	
1/1	<div></div>	0s	31ms/step	
1/1	<div></div>	0s	31ms/step	
1/1	<div></div>	0s	33ms/step	
1/1	<div></div>	0s	30ms/step	
1/1	<div></div>	0s	29ms/step	
1/1	<div></div>	0s	31ms/step	
1/1	<div></div>	0s	29ms/step	
1/1	<div></div>	0s	34ms/step	- loss: 0.0029
1/1	<div></div>	0s	30ms/step	- loss: 0.0031
1/1	<div></div>	0s	33ms/step	
1/1	<div></div>	0s	31ms/step	
1/1	<div></div>	0s	28ms/step	
1/1	<div></div>	0s	27ms/step	
1/1	<div></div>	0s	26ms/step	
1/1	<div></div>	0s	28ms/step	
1/1	<div></div>	0s	27ms/step	
1/1	<div></div>	0s	31ms/step	
1/1	<div></div>	0s	35ms/step	
1/1	<div></div>	0s	37ms/step	
1/1	<div></div>	0s	28ms/step	
1/1	<div></div>	0s	31ms/step	
1/1	<div></div>	0s	34ms/step	
1/1	<div></div>	0s	27ms/step	
1/1	<div></div>	0s	32ms/step	
1/1	<div></div>	0s	32ms/step	
1/1	<div></div>	0s	29ms/step	
1/1	<div></div>	0s	27ms/step	
1/1	<div></div>	0s	29ms/step	
1/1	<div></div>	0s	31ms/step	
1/1	<div></div>	0s	41ms/step	- loss: 0.0036
1/1	<div></div>	0s	42ms/step	- loss: 0.0038
1/1	<div></div>	0s	35ms/step	
1/1	<div></div>	0s	40ms/step	
1/1	<div></div>	0s	38ms/step	
1/1	<div></div>	0s	35ms/step	
1/1	<div></div>	0s	30ms/step	
1/1	<div></div>	0s	43ms/step	
1/1	<div></div>	0s	39ms/step	
1/1	<div></div>	0s	35ms/step	
1/1	<div></div>	0s	29ms/step	
1/1	<div></div>	0s	39ms/step	
1/1	<div></div>	0s	43ms/step	
1/1	<div></div>	0s	35ms/step	
1/1	<div></div>	0s	32ms/step	
1/1	<div></div>	0s	31ms/step	
1/1	<div></div>	0s	37ms/step	
1/1	<div></div>	0s	33ms/step	
1/1	<div></div>	0s	28ms/step	
1/1	<div></div>	0s	36ms/step	
1/1	<div></div>	0s	40ms/step	
1/1	<div></div>	0s	34ms/step	

```
1/1 ————— 0s 44ms/step - loss: 0.0031
1/1 ————— 0s 30ms/step - loss: 0.0031
1/1 ————— 0s 30ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 42ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 35ms/step - loss: 0.0032
1/1 ————— 0s 33ms/step - loss: 0.0031
1/1 ————— 0s 31ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 39ms/step - loss: 0.0055
1/1 ————— 0s 65ms/step - loss: 0.0051
```

Epoch: 084/149 | Loss: 0.0051 | Episodes: 416 | Win count: 4 | Win rate: 0.047 | time: 10.12 minutes

```
1/1 ————— 0s 30ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 32ms/step
```

1/1		0s	37ms/step	
1/1		0s	28ms/step	
1/1		0s	27ms/step	
1/1		0s	30ms/step	
1/1		0s	28ms/step	
1/1		0s	29ms/step	
1/1		0s	34ms/step	
1/1		0s	31ms/step	
1/1		0s	37ms/step	
1/1		0s	35ms/step	
1/1		0s	36ms/step	
1/1		0s	31ms/step	
1/1		0s	42ms/step	- loss: 0.0030
1/1		0s	41ms/step	- loss: 0.0030
1/1		0s	39ms/step	
1/1		0s	37ms/step	
1/1		0s	30ms/step	
1/1		0s	28ms/step	
1/1		0s	45ms/step	
1/1		0s	31ms/step	
1/1		0s	31ms/step	
1/1		0s	36ms/step	
1/1		0s	32ms/step	
1/1		0s	45ms/step	
1/1		0s	43ms/step	
1/1		0s	43ms/step	
1/1		0s	32ms/step	
1/1		0s	42ms/step	
1/1		0s	30ms/step	
1/1		0s	30ms/step	
1/1		0s	28ms/step	
1/1		0s	31ms/step	
1/1		0s	32ms/step	
1/1		0s	29ms/step	
1/1		0s	40ms/step	- loss: 0.0019
1/1		0s	52ms/step	- loss: 0.0018
1/1		0s	28ms/step	
1/1		0s	35ms/step	
1/1		0s	45ms/step	
1/1		0s	39ms/step	
1/1		0s	44ms/step	
1/1		0s	42ms/step	
1/1		0s	66ms/step	
1/1		0s	47ms/step	
1/1		0s	43ms/step	
1/1		0s	44ms/step	
1/1		0s	49ms/step	
1/1		0s	38ms/step	
1/1		0s	33ms/step	
1/1		0s	34ms/step	
1/1		0s	31ms/step	
1/1		0s	36ms/step	
1/1		0s	32ms/step	
1/1		0s	33ms/step	
1/1		0s	36ms/step	
1/1		0s	28ms/step	

```
1/1 ————— 0s 31ms/step - loss: 0.0027
1/1 ————— 0s 41ms/step - loss: 0.0026
1/1 ————— 0s 45ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 43ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 35ms/step - loss: 0.0036
1/1 ————— 0s 33ms/step - loss: 0.0033
```

Epoch: 085/149 | Loss: 0.0033 | Episodes: 420 | Win count: 4 | Win rate: 0.047 | time: 10.23 minutes

```
1/1 ————— 0s 35ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 44ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 37ms/step - loss: 0.0038
1/1 ————— 0s 37ms/step - loss: 0.0034
1/1 ————— 0s 29ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 35ms/step
```

1/1		0s	34ms/step	
1/1		0s	30ms/step	
1/1		0s	32ms/step	
1/1		0s	31ms/step	
1/1		0s	25ms/step	
1/1		0s	32ms/step	
1/1		0s	31ms/step	
1/1		0s	33ms/step	
1/1		0s	30ms/step	
1/1		0s	31ms/step	
1/1		0s	30ms/step	
1/1		0s	38ms/step	
1/1		0s	43ms/step	- loss: 0.0028
1/1		0s	34ms/step	- loss: 0.0028
1/1		0s	47ms/step	
1/1		0s	37ms/step	
1/1		0s	35ms/step	
1/1		0s	38ms/step	
1/1		0s	30ms/step	
1/1		0s	45ms/step	
1/1		0s	30ms/step	
1/1		0s	28ms/step	
1/1		0s	40ms/step	
1/1		0s	31ms/step	
1/1		0s	30ms/step	
1/1		0s	27ms/step	
1/1		0s	41ms/step	
1/1		0s	32ms/step	
1/1		0s	30ms/step	
1/1		0s	32ms/step	
1/1		0s	51ms/step	
1/1		0s	31ms/step	
1/1		0s	36ms/step	
1/1		0s	35ms/step	
1/1		0s	41ms/step	- loss: 0.0021
1/1		0s	32ms/step	- loss: 0.0021
1/1		0s	28ms/step	
1/1		0s	33ms/step	
1/1		0s	37ms/step	
1/1		0s	33ms/step	
1/1		0s	36ms/step	
1/1		0s	30ms/step	
1/1		0s	32ms/step	
1/1		0s	34ms/step	
1/1		0s	37ms/step	
1/1		0s	38ms/step	
1/1		0s	32ms/step	
1/1		0s	30ms/step	
1/1		0s	28ms/step	
1/1		0s	35ms/step	
1/1		0s	32ms/step	
1/1		0s	32ms/step	
1/1		0s	31ms/step	
1/1		0s	31ms/step	
1/1		0s	27ms/step	
1/1		0s	32ms/step	

```
1/1 ————— 0s 33ms/step - loss: 0.0035
1/1 ————— 0s 30ms/step - loss: 0.0035
1/1 ————— 0s 28ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 45ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 49ms/step
1/1 ————— 0s 49ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 43ms/step - loss: 0.0025
1/1 ————— 0s 36ms/step - loss: 0.0026
1/1 ————— 0s 32ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 34ms/step - loss: 0.0023
1/1 ————— 0s 37ms/step - loss: 0.0024
Epoch: 086/149 | Loss: 0.0024 | Episodes: 426 | Win count: 4 | Win rate: 0.046 | time: 10.39 minutes
1/1 ————— 0s 29ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 32ms/step
```


1/1		0s	38ms/step	
1/1		0s	40ms/step	
1/1		0s	41ms/step	
1/1		0s	30ms/step	
1/1		0s	36ms/step	
1/1		0s	37ms/step	
1/1		0s	27ms/step	
1/1		0s	33ms/step	
1/1		0s	35ms/step	
1/1		0s	28ms/step	
1/1		0s	28ms/step	
1/1		0s	35ms/step	
1/1		0s	37ms/step	- loss: 0.0042
1/1		0s	32ms/step	- loss: 0.0042
1/1		0s	39ms/step	
1/1		0s	34ms/step	
1/1		0s	33ms/step	
1/1		0s	33ms/step	
1/1		0s	31ms/step	
1/1		0s	28ms/step	
1/1		0s	32ms/step	
1/1		0s	36ms/step	
1/1		0s	30ms/step	
1/1		0s	29ms/step	
1/1		0s	35ms/step	
1/1		0s	31ms/step	
1/1		0s	32ms/step	
1/1		0s	31ms/step	
1/1		0s	35ms/step	
1/1		0s	29ms/step	
1/1		0s	39ms/step	
1/1		0s	30ms/step	
1/1		0s	39ms/step	
1/1		0s	40ms/step	
1/1		0s	31ms/step	- loss: 0.0040
1/1		0s	35ms/step	- loss: 0.0038
1/1		0s	37ms/step	
1/1		0s	32ms/step	
1/1		0s	34ms/step	
1/1		0s	30ms/step	
1/1		0s	27ms/step	
1/1		0s	34ms/step	
1/1		0s	38ms/step	
1/1		0s	34ms/step	
1/1		0s	31ms/step	
1/1		0s	38ms/step	
1/1		0s	32ms/step	
1/1		0s	32ms/step	
1/1		0s	28ms/step	
1/1		0s	25ms/step	
1/1		0s	40ms/step	
1/1		0s	32ms/step	
1/1		0s	31ms/step	
1/1		0s	29ms/step	
1/1		0s	30ms/step	
1/1		0s	26ms/step	

```
1/1 ————— 0s 32ms/step - loss: 0.0024
1/1 ————— 0s 30ms/step - loss: 0.0024
1/1 ————— 0s 30ms/step
1/1 ————— 0s 44ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 56ms/step
1/1 ————— 0s 47ms/step
1/1 ————— 0s 32ms/step - loss: 0.0033
1/1 ————— 0s 35ms/step - loss: 0.0031
1/1 ————— 0s 35ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 43ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 42ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 42ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 43ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 41ms/step - loss: 0.0029
1/1 ————— 0s 35ms/step - loss: 0.0029
Epoch: 087/149 | Loss: 0.0029 | Episodes: 431 | Win count: 4 | Win rate: 0.045 | time: 10.52 minutes
1/1 ————— 0s 39ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 39ms/step
```

1/1	=====	0s	32ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	29ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	36ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	38ms/step	
1/1	=====	0s	27ms/step	
1/1	=====	0s	28ms/step	
1/1	=====	0s	29ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	34ms/step	- loss: 0.0022
1/1	=====	0s	34ms/step	- loss: 0.0019
1/1	=====	0s	32ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	35ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	43ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	57ms/step	
1/1	=====	0s	37ms/step	
1/1	=====	0s	38ms/step	
1/1	=====	0s	36ms/step	
1/1	=====	0s	29ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	29ms/step	
1/1	=====	0s	44ms/step	
1/1	=====	0s	36ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	45ms/step	
1/1	=====	0s	40ms/step	
1/1	=====	0s	36ms/step	
1/1	=====	0s	39ms/step	- loss: 0.0027
1/1	=====	0s	44ms/step	- loss: 0.0026
1/1	=====	0s	32ms/step	
1/1	=====	0s	38ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	35ms/step	
1/1	=====	0s	39ms/step	
1/1	=====	0s	43ms/step	
1/1	=====	0s	36ms/step	
1/1	=====	0s	44ms/step	
1/1	=====	0s	41ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	35ms/step	
1/1	=====	0s	38ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	37ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	49ms/step	
1/1	=====	0s	32ms/step	

```
1/1 ██████████ 0s 35ms/step - loss: 0.0031
1/1 ██████████ 0s 40ms/step - loss: 0.0032
Epoch: 088/149 | Loss: 0.0032 | Episodes: 434 | Win count: 4 | Win rate: 0.045 | time: 10.60 minutes
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 50ms/step
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 51ms/step
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 43ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 38ms/step - loss: 0.0033
1/1 ██████████ 0s 36ms/step - loss: 0.0032
1/1 ██████████ 0s 40ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 41ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 56ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 40ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 52ms/step
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 34ms/step - loss: 0.0032
1/1 ██████████ 0s 36ms/step - loss: 0.0032
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 32ms/step
```

1/1	=====	0s	35ms/step	
1/1	=====	0s	30ms/step	
1/1	=====	0s	29ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	30ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	25ms/step	
1/1	=====	0s	29ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	37ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	29ms/step	- loss: 0.0031
1/1	=====	0s	38ms/step	- loss: 0.0030
1/1	=====	0s	40ms/step	
1/1	=====	0s	35ms/step	
1/1	=====	0s	38ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	28ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	28ms/step	
1/1	=====	0s	43ms/step	
1/1	=====	0s	37ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	41ms/step	
1/1	=====	0s	29ms/step	
1/1	=====	0s	40ms/step	
1/1	=====	0s	39ms/step	
1/1	=====	0s	30ms/step	
1/1	=====	0s	30ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	42ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	33ms/step	- loss: 0.0036
1/1	=====	0s	47ms/step	- loss: 0.0035
1/1	=====	0s	27ms/step	
1/1	=====	0s	26ms/step	
1/1	=====	0s	30ms/step	
1/1	=====	0s	25ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	27ms/step	
1/1	=====	0s	28ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	28ms/step	
1/1	=====	0s	40ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	40ms/step	
1/1	=====	0s	39ms/step	
1/1	=====	0s	36ms/step	
1/1	=====	0s	30ms/step	
1/1	=====	0s	30ms/step	
1/1	=====	0s	36ms/step	
1/1	=====	0s	30ms/step	
1/1	=====	0s	31ms/step	

```
1/1 ————— 0s 39ms/step - loss: 0.0032
1/1 ————— 0s 39ms/step - loss: 0.0032
1/1 ————— 0s 41ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 57ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 52ms/step - loss: 0.0032
1/1 ————— 0s 33ms/step - loss: 0.0032
```

Epoch: 089/149 | Loss: 0.0032 | Episodes: 440 | Win count: 4 | Win rate: 0.044 | time: 10.77 minutes

```
1/1 ————— 0s 39ms/step
1/1 ————— 0s 44ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 45ms/step - loss: 0.0036
1/1 ————— 0s 45ms/step - loss: 0.0035
1/1 ————— 0s 32ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 29ms/step
```

1/1	0s	30ms/step	
1/1	0s	29ms/step	
1/1	0s	38ms/step	
1/1	0s	40ms/step	
1/1	0s	40ms/step	
1/1	0s	34ms/step	
1/1	0s	38ms/step	
1/1	0s	27ms/step	
1/1	0s	35ms/step	
1/1	0s	31ms/step	
1/1	0s	44ms/step	
1/1	0s	40ms/step	
1/1	0s	58ms/step	- loss: 0.0031
1/1	0s	53ms/step	- loss: 0.0030
1/1	0s	32ms/step	
1/1	0s	33ms/step	
1/1	0s	29ms/step	
1/1	0s	28ms/step	
1/1	0s	29ms/step	
1/1	0s	33ms/step	
1/1	0s	39ms/step	
1/1	0s	34ms/step	
1/1	0s	31ms/step	
1/1	0s	30ms/step	
1/1	0s	34ms/step	
1/1	0s	32ms/step	
1/1	0s	53ms/step	
1/1	0s	28ms/step	
1/1	0s	32ms/step	
1/1	0s	35ms/step	
1/1	0s	27ms/step	
1/1	0s	31ms/step	
1/1	0s	32ms/step	
1/1	0s	37ms/step	
1/1	0s	33ms/step	- loss: 0.0034
1/1	0s	34ms/step	- loss: 0.0032
1/1	0s	39ms/step	
1/1	0s	36ms/step	
1/1	0s	36ms/step	
1/1	0s	34ms/step	
1/1	0s	32ms/step	
1/1	0s	36ms/step	
1/1	0s	28ms/step	
1/1	0s	32ms/step	
1/1	0s	36ms/step	
1/1	0s	35ms/step	
1/1	0s	46ms/step	
1/1	0s	34ms/step	
1/1	0s	41ms/step	
1/1	0s	32ms/step	
1/1	0s	31ms/step	
1/1	0s	32ms/step	
1/1	0s	36ms/step	
1/1	0s	32ms/step	
1/1	0s	35ms/step	
1/1	0s	35ms/step	

```
1/1 ██████████ 0s 34ms/step - loss: 0.0031
1/1 ██████████ 0s 35ms/step - loss: 0.0030
Epoch: 090/149 | Loss: 0.0030 | Episodes: 444 | Win count: 4 | Win rate: 0.044 | time: 10.88 minutes
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 45ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 27ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 41ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 41ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 44ms/step
1/1 ██████████ 0s 38ms/step - loss: 0.0026
1/1 ██████████ 0s 41ms/step - loss: 0.0026
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 45ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 26ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 32ms/step - loss: 0.0036
1/1 ██████████ 0s 34ms/step - loss: 0.0036
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 26ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 34ms/step
```


1/1	=====	0s	34ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	26ms/step	
1/1	=====	0s	38ms/step	
1/1	=====	0s	36ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	35ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	30ms/step	
1/1	=====	0s	36ms/step	
1/1	=====	0s	38ms/step	
1/1	=====	0s	43ms/step	- loss: 0.0023
1/1	=====	0s	62ms/step	- loss: 0.0023
1/1	=====	0s	26ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	30ms/step	
1/1	=====	0s	39ms/step	
1/1	=====	0s	37ms/step	
1/1	=====	0s	28ms/step	
1/1	=====	0s	30ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	30ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	41ms/step	
1/1	=====	0s	43ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	35ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	32ms/step	- loss: 0.0022
1/1	=====	0s	44ms/step	- loss: 0.0022
1/1	=====	0s	34ms/step	
1/1	=====	0s	36ms/step	
1/1	=====	0s	40ms/step	
1/1	=====	0s	29ms/step	
1/1	=====	0s	26ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	36ms/step	
1/1	=====	0s	38ms/step	
1/1	=====	0s	43ms/step	
1/1	=====	0s	29ms/step	
1/1	=====	0s	38ms/step	
1/1	=====	0s	29ms/step	
1/1	=====	0s	45ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	38ms/step	
1/1	=====	0s	27ms/step	
1/1	=====	0s	39ms/step	
1/1	=====	0s	34ms/step	

```
1/1 ————— 0s 30ms/step - loss: 0.0030
1/1 ————— 0s 30ms/step - loss: 0.0029
1/1 ————— 0s 30ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 45ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 54ms/step
1/1 ————— 0s 35ms/step - loss: 0.0030
1/1 ————— 0s 45ms/step - loss: 0.0030
1/1 ————— 0s 44ms/step
1/1 ————— 0s 62ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 43ms/step
1/1 ————— 0s 45ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 34ms/step - loss: 0.0033
1/1 ————— 0s 45ms/step - loss: 0.0032
```

Epoch: 091/149 | Loss: 0.0032 | Episodes: 451 | Win count: 4 | Win rate: 0.043 | time: 11.06 minutes

```
1/1 ————— 0s 30ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 35ms/step
```

1/1	=====	0s	39ms/step	
1/1	=====	0s	35ms/step	
1/1	=====	0s	38ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	36ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	30ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	30ms/step	
1/1	=====	0s	40ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	54ms/step	- loss: 0.0018
1/1	=====	0s	49ms/step	- loss: 0.0017
1/1	=====	0s	34ms/step	
1/1	=====	0s	40ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	26ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	29ms/step	
1/1	=====	0s	37ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	42ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	30ms/step	
1/1	=====	0s	40ms/step	
1/1	=====	0s	38ms/step	
1/1	=====	0s	36ms/step	
1/1	=====	0s	36ms/step	- loss: 0.0025
1/1	=====	0s	47ms/step	- loss: 0.0023
1/1	=====	0s	35ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	51ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	36ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	29ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	42ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	39ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	29ms/step	
1/1	=====	0s	33ms/step	

```
1/1 ██████████ 0s 35ms/step - loss: 0.0022
1/1 ██████████ 0s 43ms/step - loss: 0.0020
Epoch: 092/149 | Loss: 0.0020 | Episodes: 454 | Win count: 4 | Win rate: 0.043 | time: 11.14 minutes
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 46ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 40ms/step
1/1 ██████████ 0s 41ms/step
1/1 ██████████ 0s 47ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 37ms/step - loss: 0.0024
1/1 ██████████ 0s 54ms/step - loss: 0.0023
1/1 ██████████ 0s 42ms/step
1/1 ██████████ 0s 42ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 40ms/step
1/1 ██████████ 0s 40ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 51ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 47ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 45ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 32ms/step - loss: 0.0013
1/1 ██████████ 0s 37ms/step - loss: 0.0013
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 44ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 31ms/step
```

1/1	0s	27ms/step	
1/1	0s	28ms/step	
1/1	0s	40ms/step	
1/1	0s	30ms/step	
1/1	0s	30ms/step	
1/1	0s	26ms/step	
1/1	0s	28ms/step	
1/1	0s	39ms/step	
1/1	0s	37ms/step	
1/1	0s	26ms/step	
1/1	0s	41ms/step	
1/1	0s	31ms/step	
1/1	0s	47ms/step	- loss: 0.0016
1/1	0s	39ms/step	- loss: 0.0015
1/1	0s	29ms/step	
1/1	0s	35ms/step	
1/1	0s	30ms/step	
1/1	0s	31ms/step	
1/1	0s	29ms/step	
1/1	0s	44ms/step	
1/1	0s	30ms/step	
1/1	0s	32ms/step	
1/1	0s	33ms/step	
1/1	0s	34ms/step	
1/1	0s	38ms/step	
1/1	0s	32ms/step	
1/1	0s	31ms/step	
1/1	0s	30ms/step	
1/1	0s	32ms/step	
1/1	0s	36ms/step	
1/1	0s	32ms/step	
1/1	0s	43ms/step	
1/1	0s	33ms/step	
1/1	0s	50ms/step	
1/1	0s	40ms/step	- loss: 0.0023
1/1	0s	50ms/step	- loss: 0.0023
1/1	0s	50ms/step	
1/1	0s	35ms/step	
1/1	0s	35ms/step	
1/1	0s	32ms/step	
1/1	0s	31ms/step	
1/1	0s	33ms/step	
1/1	0s	28ms/step	
1/1	0s	29ms/step	
1/1	0s	28ms/step	
1/1	0s	28ms/step	
1/1	0s	32ms/step	
1/1	0s	28ms/step	
1/1	0s	32ms/step	
1/1	0s	32ms/step	
1/1	0s	30ms/step	
1/1	0s	41ms/step	
1/1	0s	36ms/step	
1/1	0s	43ms/step	
1/1	0s	37ms/step	
1/1	0s	30ms/step	

```
1/1 ██████████ 0s 37ms/step - loss: 0.0030
1/1 ██████████ 0s 34ms/step - loss: 0.0030
Epoch: 093/149 | Loss: 0.0030 | Episodes: 459 | Win count: 4 | Win rate: 0.043 | time: 11.28 minutes
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 50ms/step
1/1 ██████████ 0s 47ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 41ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 46ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 42ms/step
1/1 ██████████ 0s 32ms/step - loss: 0.0029
1/1 ██████████ 0s 46ms/step - loss: 0.0029
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 42ms/step
1/1 ██████████ 0s 40ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 44ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 42ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 39ms/step - loss: 0.0020
1/1 ██████████ 0s 50ms/step - loss: 0.0019
1/1 ██████████ 0s 41ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 40ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 38ms/step
```

```
1/1 0s 44ms/step
1/1 0s 35ms/step
1/1 0s 32ms/step
1/1 0s 41ms/step
1/1 0s 28ms/step
1/1 0s 38ms/step
1/1 0s 39ms/step
1/1 0s 38ms/step
1/1 0s 34ms/step
1/1 0s 40ms/step
1/1 0s 40ms/step
1/1 0s 38ms/step
1/1 0s 38ms/step - loss: 0.0026
1/1 0s 32ms/step - loss: 0.0026
1/1 0s 28ms/step
1/1 0s 35ms/step
1/1 0s 32ms/step
1/1 0s 32ms/step
1/1 0s 30ms/step
1/1 0s 42ms/step
1/1 0s 36ms/step
1/1 0s 35ms/step
1/1 0s 44ms/step
1/1 0s 31ms/step
1/1 0s 33ms/step
1/1 0s 27ms/step
1/1 0s 30ms/step
1/1 0s 38ms/step
1/1 0s 36ms/step
1/1 0s 34ms/step
1/1 0s 37ms/step
1/1 0s 28ms/step
1/1 0s 32ms/step
1/1 0s 37ms/step
1/1 0s 32ms/step - loss: 0.0032
1/1 0s 38ms/step - loss: 0.0030
Epoch: 094/149 | Loss: 0.0030 | Episodes: 463 | Win count: 4 | Win rate: 0.042 | time: 11.39 minutes
1/1 0s 30ms/step
1/1 0s 29ms/step
1/1 0s 31ms/step
1/1 0s 35ms/step
1/1 0s 34ms/step
1/1 0s 31ms/step
1/1 0s 31ms/step
1/1 0s 27ms/step
1/1 0s 26ms/step
1/1 0s 34ms/step
1/1 0s 25ms/step
1/1 0s 30ms/step
1/1 0s 36ms/step
1/1 0s 27ms/step
1/1 0s 31ms/step
1/1 0s 52ms/step
1/1 0s 31ms/step
1/1 0s 48ms/step
```

1/1	<div></div>	0s	41ms/step	
1/1	<div></div>	0s	37ms/step	
1/1	<div></div>	0s	42ms/step	- loss: 0.0022
1/1	<div></div>	0s	37ms/step	- loss: 0.0022
1/1	<div></div>	0s	29ms/step	
1/1	<div></div>	0s	26ms/step	
1/1	<div></div>	0s	41ms/step	
1/1	<div></div>	0s	35ms/step	
1/1	<div></div>	0s	32ms/step	
1/1	<div></div>	0s	41ms/step	
1/1	<div></div>	0s	33ms/step	
1/1	<div></div>	0s	34ms/step	
1/1	<div></div>	0s	32ms/step	
1/1	<div></div>	0s	44ms/step	
1/1	<div></div>	0s	31ms/step	
1/1	<div></div>	0s	40ms/step	
1/1	<div></div>	0s	28ms/step	
1/1	<div></div>	0s	46ms/step	
1/1	<div></div>	0s	39ms/step	
1/1	<div></div>	0s	39ms/step	
1/1	<div></div>	0s	28ms/step	
1/1	<div></div>	0s	44ms/step	
1/1	<div></div>	0s	37ms/step	
1/1	<div></div>	0s	37ms/step	
1/1	<div></div>	0s	41ms/step	- loss: 0.0032
1/1	<div></div>	0s	49ms/step	- loss: 0.0031
1/1	<div></div>	0s	36ms/step	
1/1	<div></div>	0s	38ms/step	
1/1	<div></div>	0s	44ms/step	
1/1	<div></div>	0s	32ms/step	
1/1	<div></div>	0s	35ms/step	
1/1	<div></div>	0s	35ms/step	
1/1	<div></div>	0s	32ms/step	
1/1	<div></div>	0s	35ms/step	
1/1	<div></div>	0s	42ms/step	
1/1	<div></div>	0s	29ms/step	
1/1	<div></div>	0s	50ms/step	
1/1	<div></div>	0s	33ms/step	
1/1	<div></div>	0s	39ms/step	
1/1	<div></div>	0s	39ms/step	
1/1	<div></div>	0s	36ms/step	
1/1	<div></div>	0s	31ms/step	
1/1	<div></div>	0s	31ms/step	
1/1	<div></div>	0s	41ms/step	
1/1	<div></div>	0s	48ms/step	
1/1	<div></div>	0s	34ms/step	
1/1	<div></div>	0s	46ms/step	- loss: 0.0040
1/1	<div></div>	0s	43ms/step	- loss: 0.0037
1/1	<div></div>	0s	41ms/step	
1/1	<div></div>	0s	38ms/step	
1/1	<div></div>	0s	38ms/step	
1/1	<div></div>	0s	38ms/step	
1/1	<div></div>	0s	37ms/step	
1/1	<div></div>	0s	34ms/step	
1/1	<div></div>	0s	28ms/step	
1/1	<div></div>	0s	27ms/step	

1/1	0s	34ms/step	
1/1	0s	30ms/step	
1/1	0s	39ms/step	
1/1	0s	32ms/step	
1/1	0s	40ms/step	
1/1	0s	32ms/step	
1/1	0s	38ms/step	
1/1	0s	37ms/step	
1/1	0s	34ms/step	
1/1	0s	33ms/step	
1/1	0s	34ms/step	
1/1	0s	31ms/step	
1/1	0s	33ms/step	- loss: 0.0033
1/1	0s	40ms/step	- loss: 0.0031
1/1	0s	27ms/step	
1/1	0s	32ms/step	
1/1	0s	36ms/step	
1/1	0s	38ms/step	
1/1	0s	34ms/step	
1/1	0s	37ms/step	
1/1	0s	35ms/step	
1/1	0s	37ms/step	
1/1	0s	35ms/step	
1/1	0s	33ms/step	
1/1	0s	40ms/step	
1/1	0s	62ms/step	
1/1	0s	38ms/step	
1/1	0s	46ms/step	
1/1	0s	33ms/step	
1/1	0s	32ms/step	
1/1	0s	33ms/step	
1/1	0s	36ms/step	
1/1	0s	28ms/step	
1/1	0s	31ms/step	
1/1	0s	39ms/step	- loss: 0.0034
1/1	0s	41ms/step	- loss: 0.0033
1/1	0s	34ms/step	
1/1	0s	30ms/step	
1/1	0s	25ms/step	
1/1	0s	40ms/step	
1/1	0s	47ms/step	
1/1	0s	50ms/step	
1/1	0s	31ms/step	
1/1	0s	27ms/step	
1/1	0s	30ms/step	
1/1	0s	32ms/step	
1/1	0s	35ms/step	
1/1	0s	38ms/step	
1/1	0s	30ms/step	
1/1	0s	34ms/step	
1/1	0s	35ms/step	
1/1	0s	47ms/step	
1/1	0s	37ms/step	
1/1	0s	31ms/step	
1/1	0s	32ms/step	
1/1	0s	39ms/step	

```
1/1 ————— 0s 50ms/step - loss: 0.0028
1/1 ————— 0s 51ms/step - loss: 0.0028
1/1 ————— 0s 31ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 44ms/step
1/1 ————— 0s 43ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 47ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 55ms/step - loss: 0.0022
1/1 ————— 0s 49ms/step - loss: 0.0021
```

Epoch: 095/149 | Loss: 0.0021 | Episodes: 470 | Win count: 4 | Win rate: 0.042 | time: 11.59 minutes

```
1/1 ————— 0s 28ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 46ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 49ms/step - loss: 0.0018
1/1 ————— 0s 48ms/step - loss: 0.0020
1/1 ————— 0s 28ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 40ms/step
```

1/1	0s	30ms/step	
1/1	0s	35ms/step	
1/1	0s	40ms/step	
1/1	0s	36ms/step	
1/1	0s	31ms/step	
1/1	0s	27ms/step	
1/1	0s	30ms/step	
1/1	0s	32ms/step	
1/1	0s	34ms/step	
1/1	0s	47ms/step	
1/1	0s	31ms/step	
1/1	0s	28ms/step	
1/1	0s	37ms/step	- loss: 0.0022
1/1	0s	54ms/step	- loss: 0.0022
1/1	0s	39ms/step	
1/1	0s	41ms/step	
1/1	0s	36ms/step	
1/1	0s	32ms/step	
1/1	0s	36ms/step	
1/1	0s	36ms/step	
1/1	0s	34ms/step	
1/1	0s	31ms/step	
1/1	0s	42ms/step	
1/1	0s	36ms/step	
1/1	0s	34ms/step	
1/1	0s	34ms/step	
1/1	0s	30ms/step	
1/1	0s	31ms/step	
1/1	0s	33ms/step	
1/1	0s	39ms/step	
1/1	0s	37ms/step	
1/1	0s	27ms/step	
1/1	0s	34ms/step	
1/1	0s	33ms/step	
1/1	0s	42ms/step	- loss: 0.0024
1/1	0s	49ms/step	- loss: 0.0024
1/1	0s	33ms/step	
1/1	0s	34ms/step	
1/1	0s	27ms/step	
1/1	0s	39ms/step	
1/1	0s	39ms/step	
1/1	0s	38ms/step	
1/1	0s	39ms/step	
1/1	0s	29ms/step	
1/1	0s	47ms/step	
1/1	0s	45ms/step	
1/1	0s	35ms/step	
1/1	0s	44ms/step	
1/1	0s	31ms/step	
1/1	0s	35ms/step	
1/1	0s	38ms/step	
1/1	0s	35ms/step	
1/1	0s	34ms/step	
1/1	0s	39ms/step	
1/1	0s	30ms/step	
1/1	0s	46ms/step	

```
1/1 ██████████ 0s 38ms/step - loss: 0.0032
1/1 ██████████ 0s 43ms/step - loss: 0.0031
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 40ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 26ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 49ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 40ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 27ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 36ms/step - loss: 0.0029
1/1 ██████████ 0s 66ms/step - loss: 0.0029
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 27ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 42ms/step
1/1 ██████████ 0s 43ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 42ms/step - loss: 0.0029
1/1 ██████████ 0s 37ms/step - loss: 0.0028
1/1 ██████████ 0s 26ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 42ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 35ms/step
```

```
1/1 0s 39ms/step
1/1 0s 40ms/step
1/1 0s 33ms/step
1/1 0s 31ms/step
1/1 0s 37ms/step
1/1 0s 36ms/step
1/1 0s 46ms/step
1/1 0s 35ms/step
1/1 0s 44ms/step
1/1 0s 33ms/step
1/1 0s 39ms/step - loss: 0.0034
1/1 0s 39ms/step - loss: 0.0034
Epoch: 096/149 | Loss: 0.0034 | Episodes: 477 | Win count: 4 | Win rate: 0.041 | time: 11.77 minutes
1/1 0s 31ms/step
1/1 0s 33ms/step
1/1 0s 40ms/step
1/1 0s 35ms/step
1/1 0s 34ms/step
1/1 0s 46ms/step
1/1 0s 38ms/step
1/1 0s 32ms/step
1/1 0s 32ms/step
1/1 0s 27ms/step
1/1 0s 33ms/step
1/1 0s 34ms/step
1/1 0s 29ms/step
1/1 0s 33ms/step
1/1 0s 32ms/step
1/1 0s 29ms/step
1/1 0s 37ms/step
1/1 0s 32ms/step
1/1 0s 32ms/step
1/1 0s 47ms/step
1/1 0s 35ms/step - loss: 0.0031
1/1 0s 38ms/step - loss: 0.0031
1/1 0s 53ms/step
1/1 0s 35ms/step
1/1 0s 28ms/step
1/1 0s 31ms/step
1/1 0s 27ms/step
1/1 0s 36ms/step
1/1 0s 30ms/step
1/1 0s 36ms/step
1/1 0s 37ms/step
1/1 0s 32ms/step
1/1 0s 26ms/step
1/1 0s 42ms/step
1/1 0s 33ms/step
1/1 0s 40ms/step
1/1 0s 35ms/step
1/1 0s 44ms/step
1/1 0s 42ms/step
1/1 0s 44ms/step
1/1 0s 32ms/step
1/1 0s 49ms/step
```

```
1/1 ————— 0s 44ms/step - loss: 0.0019
1/1 ————— 0s 37ms/step - loss: 0.0018
1/1 ————— 0s 37ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 43ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 40ms/step - loss: 0.0025
1/1 ————— 0s 56ms/step - loss: 0.0025
1/1 ————— 0s 37ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 42ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 40ms/step - loss: 0.0023
1/1 ————— 0s 43ms/step - loss: 0.0022
```

Epoch: 097/149 | Loss: 0.0022 | Episodes: 481 | Win count: 4 | Win rate: 0.041 | time: 11.88 minutes

```
1/1 ————— 0s 32ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 41ms/step
```

1/1		0s	43ms/step	
1/1		0s	31ms/step	
1/1		0s	31ms/step	
1/1		0s	44ms/step	
1/1		0s	29ms/step	
1/1		0s	32ms/step	
1/1		0s	35ms/step	
1/1		0s	41ms/step	
1/1		0s	47ms/step	
1/1		0s	35ms/step	
1/1		0s	48ms/step	
1/1		0s	30ms/step	
1/1		0s	54ms/step	- loss: 0.0023
1/1		0s	52ms/step	- loss: 0.0022
1/1		0s	30ms/step	
1/1		0s	34ms/step	
1/1		0s	29ms/step	
1/1		0s	34ms/step	
1/1		0s	31ms/step	
1/1		0s	31ms/step	
1/1		0s	30ms/step	
1/1		0s	33ms/step	
1/1		0s	32ms/step	
1/1		0s	30ms/step	
1/1		0s	43ms/step	
1/1		0s	36ms/step	
1/1		0s	29ms/step	
1/1		0s	34ms/step	
1/1		0s	34ms/step	
1/1		0s	33ms/step	
1/1		0s	30ms/step	
1/1		0s	41ms/step	
1/1		0s	30ms/step	
1/1		0s	30ms/step	
1/1		0s	37ms/step	- loss: 0.0036
1/1		0s	46ms/step	- loss: 0.0034
1/1		0s	32ms/step	
1/1		0s	42ms/step	
1/1		0s	32ms/step	
1/1		0s	34ms/step	
1/1		0s	46ms/step	
1/1		0s	45ms/step	
1/1		0s	27ms/step	
1/1		0s	28ms/step	
1/1		0s	31ms/step	
1/1		0s	36ms/step	
1/1		0s	33ms/step	
1/1		0s	43ms/step	
1/1		0s	31ms/step	
1/1		0s	30ms/step	
1/1		0s	31ms/step	
1/1		0s	46ms/step	
1/1		0s	28ms/step	
1/1		0s	59ms/step	
1/1		0s	42ms/step	
1/1		0s	39ms/step	

```
1/1 ██████████ 0s 37ms/step - loss: 0.0024
1/1 ██████████ 0s 51ms/step - loss: 0.0024
Epoch: 098/149 | Loss: 0.0024 | Episodes: 484 | Win count: 4 | Win rate: 0.040 | time: 11.96 minutes
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 41ms/step
1/1 ██████████ 0s 39ms/step - loss: 0.0035
1/1 ██████████ 0s 38ms/step - loss: 0.0035
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 43ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 56ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 43ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 43ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 38ms/step - loss: 0.0030
1/1 ██████████ 0s 44ms/step - loss: 0.0028
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 43ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 45ms/step
1/1 ██████████ 0s 40ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 32ms/step
```



```
1/1 ————— 0s 34ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 45ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 44ms/step
1/1 ————— 0s 45ms/step - loss: 0.0028
1/1 ————— 0s 52ms/step - loss: 0.0026
Epoch: 099/149 | Loss: 0.0026 | Episodes: 487 | Win count: 5 | Win rate: 0.050 | time: 12.05 minutes
1/1 ————— 0s 48ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 43ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 46ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 48ms/step - loss: 0.0030
1/1 ————— 0s 42ms/step - loss: 0.0029
1/1 ————— 0s 37ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 45ms/step
1/1 ————— 0s 51ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 38ms/step
```

1/1	0s	33ms/step	
1/1	0s	40ms/step	
1/1	0s	38ms/step	- loss: 0.0030
1/1	0s	41ms/step	- loss: 0.0029
1/1	0s	31ms/step	
1/1	0s	42ms/step	
1/1	0s	29ms/step	
1/1	0s	30ms/step	
1/1	0s	29ms/step	
1/1	0s	35ms/step	
1/1	0s	49ms/step	
1/1	0s	33ms/step	
1/1	0s	34ms/step	
1/1	0s	43ms/step	
1/1	0s	31ms/step	
1/1	0s	31ms/step	
1/1	0s	33ms/step	
1/1	0s	28ms/step	
1/1	0s	31ms/step	
1/1	0s	33ms/step	
1/1	0s	34ms/step	
1/1	0s	41ms/step	
1/1	0s	34ms/step	
1/1	0s	38ms/step	
1/1	0s	38ms/step	- loss: 0.0028
1/1	0s	30ms/step	- loss: 0.0024
1/1	0s	34ms/step	
1/1	0s	36ms/step	
1/1	0s	35ms/step	
1/1	0s	30ms/step	
1/1	0s	33ms/step	
1/1	0s	34ms/step	
1/1	0s	28ms/step	
1/1	0s	31ms/step	
1/1	0s	31ms/step	
1/1	0s	40ms/step	
1/1	0s	35ms/step	
1/1	0s	29ms/step	
1/1	0s	36ms/step	
1/1	0s	42ms/step	
1/1	0s	33ms/step	
1/1	0s	44ms/step	
1/1	0s	53ms/step	
1/1	0s	46ms/step	
1/1	0s	35ms/step	
1/1	0s	38ms/step	
1/1	0s	37ms/step	- loss: 0.0023
1/1	0s	56ms/step	- loss: 0.0025
1/1	0s	37ms/step	
1/1	0s	34ms/step	
1/1	0s	35ms/step	
1/1	0s	32ms/step	
1/1	0s	41ms/step	
1/1	0s	41ms/step	
1/1	0s	39ms/step	
1/1	0s	40ms/step	

```
1/1 0s 37ms/step
1/1 0s 38ms/step
1/1 0s 39ms/step
1/1 0s 45ms/step
1/1 0s 39ms/step
1/1 0s 49ms/step
1/1 0s 39ms/step
1/1 0s 28ms/step
1/1 0s 30ms/step
1/1 0s 36ms/step
1/1 0s 38ms/step
1/1 0s 33ms/step
1/1 0s 45ms/step - loss: 0.0340
1/1 0s 39ms/step - loss: 0.0325
1/1 0s 34ms/step
1/1 0s 28ms/step
1/1 0s 45ms/step
1/1 0s 40ms/step
1/1 0s 33ms/step
1/1 0s 36ms/step
1/1 0s 42ms/step
1/1 0s 31ms/step
1/1 0s 42ms/step
1/1 0s 34ms/step
1/1 0s 30ms/step
1/1 0s 33ms/step
1/1 0s 36ms/step
1/1 0s 38ms/step
1/1 0s 39ms/step
1/1 0s 30ms/step
1/1 0s 34ms/step
1/1 0s 32ms/step
1/1 0s 46ms/step
1/1 0s 39ms/step
1/1 0s 36ms/step - loss: 0.0033
1/1 0s 45ms/step - loss: 0.0032
Epoch: 100/149 | Loss: 0.0032 | Episodes: 493 | Win count: 5 | Win rate: 0.050 | time: 12.21 minutes
1/1 0s 30ms/step
1/1 0s 35ms/step
1/1 0s 31ms/step
1/1 0s 32ms/step
1/1 0s 29ms/step
1/1 0s 35ms/step
1/1 0s 32ms/step
1/1 0s 32ms/step
1/1 0s 31ms/step
1/1 0s 35ms/step
1/1 0s 39ms/step
1/1 0s 38ms/step
1/1 0s 38ms/step
1/1 0s 38ms/step
1/1 0s 42ms/step
1/1 0s 45ms/step
1/1 0s 35ms/step
1/1 0s 43ms/step
```

```
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 51ms/step - loss: 0.0021
1/1 ██████████ 0s 43ms/step - loss: 0.0021
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 42ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 43ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 48ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 46ms/step
1/1 ██████████ 0s 42ms/step
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 43ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 36ms/step - loss: 0.0039
1/1 ██████████ 0s 36ms/step - loss: 0.0040
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 40ms/step
1/1 ██████████ 0s 49ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 43ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 43ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 46ms/step
1/1 ██████████ 0s 53ms/step
1/1 ██████████ 0s 40ms/step
1/1 ██████████ 0s 54ms/step
1/1 ██████████ 0s 46ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 38ms/step - loss: 0.0285
1/1 ██████████ 0s 31ms/step - loss: 0.0271
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 27ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 36ms/step
```

1/1	0s	29ms/step	
1/1	0s	37ms/step	
1/1	0s	36ms/step	
1/1	0s	45ms/step	
1/1	0s	66ms/step	
1/1	0s	42ms/step	
1/1	0s	36ms/step	
1/1	0s	32ms/step	
1/1	0s	37ms/step	
1/1	0s	31ms/step	
1/1	0s	35ms/step	
1/1	0s	46ms/step	
1/1	0s	40ms/step	- loss: 0.0019
1/1	0s	45ms/step	- loss: 0.0021
1/1	0s	32ms/step	
1/1	0s	28ms/step	
1/1	0s	33ms/step	
1/1	0s	32ms/step	
1/1	0s	35ms/step	
1/1	0s	31ms/step	
1/1	0s	40ms/step	
1/1	0s	42ms/step	
1/1	0s	37ms/step	
1/1	0s	32ms/step	
1/1	0s	32ms/step	
1/1	0s	39ms/step	
1/1	0s	35ms/step	
1/1	0s	34ms/step	
1/1	0s	44ms/step	
1/1	0s	25ms/step	
1/1	0s	33ms/step	
1/1	0s	36ms/step	
1/1	0s	42ms/step	
1/1	0s	31ms/step	
1/1	0s	34ms/step	- loss: 0.0028
1/1	0s	49ms/step	- loss: 0.0028
1/1	0s	40ms/step	
1/1	0s	45ms/step	
1/1	0s	33ms/step	
1/1	0s	38ms/step	
1/1	0s	43ms/step	
1/1	0s	33ms/step	
1/1	0s	29ms/step	
1/1	0s	30ms/step	
1/1	0s	40ms/step	
1/1	0s	32ms/step	
1/1	0s	42ms/step	
1/1	0s	27ms/step	
1/1	0s	31ms/step	
1/1	0s	40ms/step	
1/1	0s	31ms/step	
1/1	0s	40ms/step	
1/1	0s	32ms/step	
1/1	0s	42ms/step	
1/1	0s	40ms/step	
1/1	0s	39ms/step	

```
1/1 ————— 0s 32ms/step - loss: 0.0035
1/1 ————— 0s 49ms/step - loss: 0.0037
Epoch: 101/149 | Loss: 0.0037 | Episodes: 499 | Win count: 5 | Win rate: 0.049 | time: 12.38 minutes
1/1 ————— 0s 33ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 45ms/step
1/1 ————— 0s 42ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 32ms/step - loss: 0.0050
1/1 ————— 0s 45ms/step - loss: 0.0052
1/1 ————— 0s 33ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 43ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 45ms/step
1/1 ————— 0s 50ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 45ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 37ms/step - loss: 0.0050
1/1 ————— 0s 42ms/step - loss: 0.0050
1/1 ————— 0s 47ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 40ms/step
```

```
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 51ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 47ms/step - loss: 0.0055
1/1 ██████████ 0s 35ms/step - loss: 0.0052
1/1 ██████████ 0s 40ms/step
1/1 ██████████ 0s 27ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 41ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 47ms/step
1/1 ██████████ 0s 44ms/step
1/1 ██████████ 0s 46ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 43ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 46ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 32ms/step - loss: 0.0025
1/1 ██████████ 0s 34ms/step - loss: 0.0022
Epoch: 102/149 | Loss: 0.0022 | Episodes: 503 | Win count: 5 | Win rate: 0.049 | time: 12.49 minutes
1/1 ██████████ 0s 40ms/step
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 41ms/step
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 42ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 42ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 33ms/step
```

```
1/1 ————— 0s 40ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 46ms/step - loss: 0.0041
1/1 ————— 0s 34ms/step - loss: 0.0036
1/1 ————— 0s 36ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 44ms/step
1/1 ————— 0s 64ms/step
1/1 ————— 0s 43ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 43ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 40ms/step - loss: 0.0026
1/1 ————— 0s 43ms/step - loss: 0.0025
1/1 ————— 0s 31ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 42ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 44ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 34ms/step - loss: 0.0034
1/1 ————— 0s 45ms/step - loss: 0.0032
1/1 ————— 0s 28ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 34ms/step
```



```
1/1 ————— 0s 33ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 46ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 46ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 53ms/step - loss: 0.0024
1/1 ————— 0s 54ms/step - loss: 0.0024
Epoch: 103/149 | Loss: 0.0024 | Episodes: 507 | Win count: 5 | Win rate: 0.048 | time: 12.60 minutes
1/1 ————— 0s 29ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 48ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 47ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 48ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 42ms/step
1/1 ————— 0s 49ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 39ms/step - loss: 0.0039
1/1 ————— 0s 31ms/step - loss: 0.0037
1/1 ————— 0s 33ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 49ms/step
1/1 ————— 0s 42ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 47ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 37ms/step
```

```
1/1 ██████████ 0s 46ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 36ms/step - loss: 0.0033
1/1 ██████████ 0s 42ms/step - loss: 0.0031
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 45ms/step
1/1 ██████████ 0s 45ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 43ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 35ms/step - loss: 0.0024
1/1 ██████████ 0s 34ms/step - loss: 0.0021
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 55ms/step
1/1 ██████████ 0s 41ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 50ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 49ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 40ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 35ms/step - loss: 0.0014
1/1 ██████████ 0s 43ms/step - loss: 0.0014
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 44ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 40ms/step
```

1/1		0s	35ms/step	
1/1		0s	37ms/step	
1/1		0s	36ms/step	
1/1		0s	42ms/step	
1/1		0s	31ms/step	
1/1		0s	41ms/step	
1/1		0s	50ms/step	
1/1		0s	37ms/step	
1/1		0s	35ms/step	
1/1		0s	35ms/step	
1/1		0s	27ms/step	
1/1		0s	32ms/step	
1/1		0s	39ms/step	- loss: 0.0023
1/1		0s	36ms/step	- loss: 0.0022
1/1		0s	38ms/step	
1/1		0s	39ms/step	
1/1		0s	32ms/step	
1/1		0s	41ms/step	
1/1		0s	31ms/step	
1/1		0s	38ms/step	
1/1		0s	36ms/step	
1/1		0s	32ms/step	
1/1		0s	29ms/step	
1/1		0s	29ms/step	
1/1		0s	41ms/step	
1/1		0s	31ms/step	
1/1		0s	42ms/step	
1/1		0s	38ms/step	
1/1		0s	32ms/step	
1/1		0s	38ms/step	
1/1		0s	31ms/step	
1/1		0s	37ms/step	
1/1		0s	41ms/step	
1/1		0s	32ms/step	
1/1		0s	36ms/step	- loss: 0.0020
1/1		0s	37ms/step	- loss: 0.0021
1/1		0s	41ms/step	
1/1		0s	33ms/step	
1/1		0s	34ms/step	
1/1		0s	45ms/step	
1/1		0s	37ms/step	
1/1		0s	47ms/step	
1/1		0s	31ms/step	
1/1		0s	32ms/step	
1/1		0s	44ms/step	
1/1		0s	36ms/step	
1/1		0s	31ms/step	
1/1		0s	38ms/step	
1/1		0s	37ms/step	
1/1		0s	36ms/step	
1/1		0s	31ms/step	
1/1		0s	35ms/step	
1/1		0s	40ms/step	
1/1		0s	31ms/step	
1/1		0s	30ms/step	
1/1		0s	36ms/step	

```
1/1 ————— 0s 39ms/step - loss: 0.0318
1/1 ————— 0s 32ms/step - loss: 0.0313
1/1 ————— 0s 40ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 50ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 47ms/step - loss: 0.0038
1/1 ————— 0s 33ms/step - loss: 0.0038
```

Epoch: 104/149 | Loss: 0.0038 | Episodes: 512 | Win count: 5 | Win rate: 0.048 | time: 12.81 minutes

```
1/1 ————— 0s 33ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 48ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 59ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 51ms/step
1/1 ————— 0s 50ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 43ms/step
1/1 ————— 0s 42ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 49ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 36ms/step - loss: 0.0021
1/1 ————— 0s 42ms/step - loss: 0.0022
1/1 ————— 0s 33ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 44ms/step
```

1/1	<div></div>	0s	40ms/step	
1/1	<div></div>	0s	48ms/step	
1/1	<div></div>	0s	35ms/step	
1/1	<div></div>	0s	34ms/step	
1/1	<div></div>	0s	49ms/step	
1/1	<div></div>	0s	33ms/step	
1/1	<div></div>	0s	41ms/step	
1/1	<div></div>	0s	41ms/step	
1/1	<div></div>	0s	35ms/step	
1/1	<div></div>	0s	29ms/step	
1/1	<div></div>	0s	70ms/step	
1/1	<div></div>	0s	43ms/step	
1/1	<div></div>	0s	52ms/step	- loss: 0.0023
1/1	<div></div>	0s	38ms/step	- loss: 0.0022
1/1	<div></div>	0s	36ms/step	
1/1	<div></div>	0s	40ms/step	
1/1	<div></div>	0s	31ms/step	
1/1	<div></div>	0s	32ms/step	
1/1	<div></div>	0s	38ms/step	
1/1	<div></div>	0s	28ms/step	
1/1	<div></div>	0s	34ms/step	
1/1	<div></div>	0s	36ms/step	
1/1	<div></div>	0s	39ms/step	
1/1	<div></div>	0s	31ms/step	
1/1	<div></div>	0s	41ms/step	
1/1	<div></div>	0s	30ms/step	
1/1	<div></div>	0s	36ms/step	
1/1	<div></div>	0s	38ms/step	
1/1	<div></div>	0s	38ms/step	
1/1	<div></div>	0s	35ms/step	
1/1	<div></div>	0s	31ms/step	
1/1	<div></div>	0s	37ms/step	
1/1	<div></div>	0s	35ms/step	
1/1	<div></div>	0s	41ms/step	
1/1	<div></div>	0s	37ms/step	- loss: 0.0020
1/1	<div></div>	0s	35ms/step	- loss: 0.0020
1/1	<div></div>	0s	31ms/step	
1/1	<div></div>	0s	33ms/step	
1/1	<div></div>	0s	41ms/step	
1/1	<div></div>	0s	30ms/step	
1/1	<div></div>	0s	28ms/step	
1/1	<div></div>	0s	35ms/step	
1/1	<div></div>	0s	32ms/step	
1/1	<div></div>	0s	32ms/step	
1/1	<div></div>	0s	44ms/step	
1/1	<div></div>	0s	33ms/step	
1/1	<div></div>	0s	37ms/step	
1/1	<div></div>	0s	34ms/step	
1/1	<div></div>	0s	35ms/step	
1/1	<div></div>	0s	38ms/step	
1/1	<div></div>	0s	33ms/step	
1/1	<div></div>	0s	35ms/step	
1/1	<div></div>	0s	28ms/step	
1/1	<div></div>	0s	32ms/step	
1/1	<div></div>	0s	33ms/step	
1/1	<div></div>	0s	35ms/step	

```
1/1 ██████████ 0s 38ms/step - loss: 0.0028
1/1 ██████████ 0s 32ms/step - loss: 0.0027
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 43ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 42ms/step
1/1 ██████████ 0s 54ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 41ms/step
1/1 ██████████ 0s 35ms/step - loss: 0.0019
1/1 ██████████ 0s 36ms/step - loss: 0.0018
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 43ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 45ms/step
1/1 ██████████ 0s 27ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 49ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 40ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 38ms/step - loss: 0.0018
1/1 ██████████ 0s 35ms/step - loss: 0.0018
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 27ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 46ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 36ms/step
```

```
1/1 ————— 0s 34ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 48ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 42ms/step - loss: 0.0315
1/1 ————— 0s 41ms/step - loss: 0.0306
1/1 ————— 0s 36ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 44ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 37ms/step - loss: 0.0020
1/1 ————— 0s 40ms/step - loss: 0.0018
Epoch: 105/149 | Loss: 0.0018 | Episodes: 512 | Win count: 5 | Win rate: 0.047 | time: 13.03 minutes
1/1 ————— 0s 31ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 49ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 48ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 45ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 44ms/step
```

```
1/1 ————— 0s 43ms/step - loss: 0.0034
1/1 ————— 0s 42ms/step - loss: 0.0035
1/1 ————— 0s 33ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 45ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 48ms/step - loss: 0.0021
1/1 ————— 0s 34ms/step - loss: 0.0022
1/1 ————— 0s 33ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 49ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 45ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 47ms/step - loss: 0.0024
1/1 ————— 0s 35ms/step - loss: 0.0023
```

Epoch: 106/149 | Loss: 0.0023 | Episodes: 512 | Win count: 5 | Win rate: 0.047 | time: 13.11 minutes

```
1/1 ————— 0s 36ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 37ms/step
```


1/1	=====	0s	32ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	30ms/step	
1/1	=====	0s	29ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	39ms/step	
1/1	=====	0s	30ms/step	
1/1	=====	0s	29ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	29ms/step	- loss: 0.0030
1/1	=====	0s	33ms/step	- loss: 0.0029
1/1	=====	0s	38ms/step	
1/1	=====	0s	43ms/step	
1/1	=====	0s	37ms/step	
1/1	=====	0s	26ms/step	
1/1	=====	0s	38ms/step	
1/1	=====	0s	39ms/step	
1/1	=====	0s	42ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	30ms/step	
1/1	=====	0s	35ms/step	
1/1	=====	0s	35ms/step	
1/1	=====	0s	28ms/step	
1/1	=====	0s	28ms/step	
1/1	=====	0s	39ms/step	
1/1	=====	0s	49ms/step	
1/1	=====	0s	36ms/step	
1/1	=====	0s	51ms/step	
1/1	=====	0s	39ms/step	
1/1	=====	0s	50ms/step	
1/1	=====	0s	41ms/step	
1/1	=====	0s	37ms/step	- loss: 0.0031
1/1	=====	0s	45ms/step	- loss: 0.0031
1/1	=====	0s	51ms/step	
1/1	=====	0s	44ms/step	
1/1	=====	0s	41ms/step	
1/1	=====	0s	37ms/step	
1/1	=====	0s	37ms/step	
1/1	=====	0s	39ms/step	
1/1	=====	0s	35ms/step	
1/1	=====	0s	29ms/step	
1/1	=====	0s	29ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	43ms/step	
1/1	=====	0s	38ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	36ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	37ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	44ms/step	

```
1/1 ————— 0s 32ms/step - loss: 0.0025
1/1 ————— 0s 34ms/step - loss: 0.0025
Epoch: 107/149 | Loss: 0.0025 | Episodes: 512 | Win count: 5 | Win rate: 0.046 | time: 13.19 minutes
1/1 ————— 0s 45ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 65ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 46ms/step - loss: 0.0045
1/1 ————— 0s 54ms/step - loss: 0.0043
1/1 ————— 0s 38ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 31ms/step - loss: 0.0352
1/1 ————— 0s 38ms/step - loss: 0.0341
1/1 ————— 0s 37ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 46ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 33ms/step
```

1/1		0s	39ms/step	
1/1		0s	36ms/step	
1/1		0s	42ms/step	
1/1		0s	34ms/step	
1/1		0s	28ms/step	
1/1		0s	39ms/step	
1/1		0s	28ms/step	
1/1		0s	27ms/step	
1/1		0s	32ms/step	
1/1		0s	29ms/step	
1/1		0s	29ms/step	
1/1		0s	33ms/step	
1/1		0s	33ms/step	- loss: 0.0026
1/1		0s	45ms/step	- loss: 0.0030
1/1		0s	38ms/step	
1/1		0s	31ms/step	
1/1		0s	31ms/step	
1/1		0s	32ms/step	
1/1		0s	34ms/step	
1/1		0s	37ms/step	
1/1		0s	33ms/step	
1/1		0s	29ms/step	
1/1		0s	32ms/step	
1/1		0s	30ms/step	
1/1		0s	43ms/step	
1/1		0s	32ms/step	
1/1		0s	32ms/step	
1/1		0s	31ms/step	
1/1		0s	33ms/step	
1/1		0s	42ms/step	
1/1		0s	32ms/step	
1/1		0s	31ms/step	
1/1		0s	34ms/step	
1/1		0s	28ms/step	
1/1		0s	38ms/step	- loss: 0.0031
1/1		0s	38ms/step	- loss: 0.0030
1/1		0s	43ms/step	
1/1		0s	36ms/step	
1/1		0s	37ms/step	
1/1		0s	39ms/step	
1/1		0s	38ms/step	
1/1		0s	30ms/step	
1/1		0s	30ms/step	
1/1		0s	39ms/step	
1/1		0s	36ms/step	
1/1		0s	31ms/step	
1/1		0s	47ms/step	
1/1		0s	32ms/step	
1/1		0s	30ms/step	
1/1		0s	36ms/step	
1/1		0s	33ms/step	
1/1		0s	35ms/step	
1/1		0s	41ms/step	
1/1		0s	37ms/step	
1/1		0s	31ms/step	
1/1		0s	32ms/step	

```
1/1 ██████████ 0s 39ms/step - loss: 0.0025
1/1 ██████████ 0s 35ms/step - loss: 0.0026
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 41ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 45ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 40ms/step
1/1 ██████████ 0s 46ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 44ms/step - loss: 0.0041
1/1 ██████████ 0s 31ms/step - loss: 0.0040
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 40ms/step
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 41ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 45ms/step
1/1 ██████████ 0s 43ms/step
1/1 ██████████ 0s 40ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 44ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 43ms/step - loss: 0.0025
1/1 ██████████ 0s 40ms/step - loss: 0.0024
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 41ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 40ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 41ms/step
```

```
1/1 0s 31ms/step
1/1 0s 30ms/step
1/1 0s 39ms/step
1/1 0s 32ms/step
1/1 0s 29ms/step
1/1 0s 27ms/step
1/1 0s 36ms/step
1/1 0s 37ms/step
1/1 0s 34ms/step
1/1 0s 47ms/step
1/1 0s 37ms/step - loss: 0.0303
1/1 0s 43ms/step - loss: 0.0296
Epoch: 108/149 | Loss: 0.0296 | Episodes: 512 | Win count: 5 | Win rate: 0.046 | time: 13.40 minutes
1/1 0s 36ms/step
1/1 0s 38ms/step
1/1 0s 35ms/step
1/1 0s 32ms/step
1/1 0s 32ms/step
1/1 0s 31ms/step
1/1 0s 30ms/step
1/1 0s 36ms/step
1/1 0s 34ms/step
1/1 0s 31ms/step
1/1 0s 34ms/step
1/1 0s 36ms/step
1/1 0s 48ms/step
1/1 0s 33ms/step
1/1 0s 33ms/step
1/1 0s 28ms/step
1/1 0s 35ms/step
1/1 0s 35ms/step
1/1 0s 34ms/step
1/1 0s 44ms/step
1/1 0s 46ms/step - loss: 0.0036
1/1 0s 37ms/step - loss: 0.0036
1/1 0s 31ms/step
1/1 0s 27ms/step
1/1 0s 32ms/step
1/1 0s 31ms/step
1/1 0s 34ms/step
1/1 0s 32ms/step
1/1 0s 36ms/step
1/1 0s 44ms/step
1/1 0s 34ms/step
1/1 0s 38ms/step
1/1 0s 32ms/step
1/1 0s 31ms/step
1/1 0s 32ms/step
1/1 0s 39ms/step
1/1 0s 33ms/step
1/1 0s 31ms/step
1/1 0s 30ms/step
1/1 0s 31ms/step
1/1 0s 36ms/step
1/1 0s 32ms/step
```

```
1/1 ————— 0s 40ms/step - loss: 0.0023
1/1 ————— 0s 50ms/step - loss: 0.0023
1/1 ————— 0s 31ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 44ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 40ms/step - loss: 0.0022
1/1 ————— 0s 39ms/step - loss: 0.0022
1/1 ————— 0s 34ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 46ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 49ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 56ms/step
1/1 ————— 0s 58ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 42ms/step - loss: 0.0016
1/1 ————— 0s 35ms/step - loss: 0.0017
1/1 ————— 0s 28ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 47ms/step
```

1/1	=====	0s	31ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	35ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	30ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	28ms/step	
1/1	=====	0s	30ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	39ms/step	- loss: 0.0328
1/1	=====	0s	33ms/step	- loss: 0.0318
1/1	=====	0s	34ms/step	
1/1	=====	0s	52ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	35ms/step	
1/1	=====	0s	28ms/step	
1/1	=====	0s	27ms/step	
1/1	=====	0s	28ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	37ms/step	
1/1	=====	0s	29ms/step	
1/1	=====	0s	39ms/step	
1/1	=====	0s	27ms/step	
1/1	=====	0s	30ms/step	
1/1	=====	0s	28ms/step	
1/1	=====	0s	38ms/step	
1/1	=====	0s	41ms/step	
1/1	=====	0s	38ms/step	
1/1	=====	0s	43ms/step	
1/1	=====	0s	36ms/step	- loss: 0.0024
1/1	=====	0s	56ms/step	- loss: 0.0025
1/1	=====	0s	33ms/step	
1/1	=====	0s	39ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	38ms/step	
1/1	=====	0s	45ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	29ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	39ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	29ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	35ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	35ms/step	
1/1	=====	0s	37ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	35ms/step	
1/1	=====	0s	56ms/step	
1/1	=====	0s	45ms/step	
1/1	=====	0s	37ms/step	- loss: 0.0032
1/1	=====	0s	41ms/step	- loss: 0.0031

Epoch: 109/149 | Loss: 0.0031 | Episodes: 512 | Win count: 5 | Win rate: 0.045 | time: 13.59 minutes

1/1	0s	31ms/step	
1/1	0s	35ms/step	
1/1	0s	35ms/step	
1/1	0s	31ms/step	
1/1	0s	34ms/step	
1/1	0s	35ms/step	
1/1	0s	47ms/step	
1/1	0s	37ms/step	
1/1	0s	36ms/step	
1/1	0s	34ms/step	
1/1	0s	47ms/step	
1/1	0s	44ms/step	
1/1	0s	37ms/step	
1/1	0s	31ms/step	
1/1	0s	36ms/step	
1/1	0s	30ms/step	
1/1	0s	30ms/step	
1/1	0s	36ms/step	
1/1	0s	30ms/step	
1/1	0s	39ms/step	
1/1	0s	35ms/step	- loss: 0.0040
1/1	0s	47ms/step	- loss: 0.0039
1/1	0s	34ms/step	
1/1	0s	31ms/step	
1/1	0s	38ms/step	
1/1	0s	31ms/step	
1/1	0s	30ms/step	
1/1	0s	31ms/step	
1/1	0s	40ms/step	
1/1	0s	36ms/step	
1/1	0s	34ms/step	
1/1	0s	39ms/step	
1/1	0s	40ms/step	
1/1	0s	35ms/step	
1/1	0s	37ms/step	
1/1	0s	34ms/step	
1/1	0s	48ms/step	
1/1	0s	38ms/step	
1/1	0s	36ms/step	
1/1	0s	32ms/step	
1/1	0s	38ms/step	
1/1	0s	37ms/step	
1/1	0s	36ms/step	- loss: 0.0034
1/1	0s	47ms/step	- loss: 0.0035
1/1	0s	27ms/step	
1/1	0s	37ms/step	
1/1	0s	35ms/step	
1/1	0s	30ms/step	
1/1	0s	32ms/step	
1/1	0s	32ms/step	
1/1	0s	38ms/step	
1/1	0s	29ms/step	
1/1	0s	34ms/step	
1/1	0s	38ms/step	


```
1/1 ————— 0s 39ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 43ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 37ms/step - loss: 0.0035
1/1 ————— 0s 39ms/step - loss: 0.0033
1/1 ————— 0s 27ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 50ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 46ms/step
1/1 ————— 0s 48ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 44ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 42ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 39ms/step - loss: 0.0040
1/1 ————— 0s 37ms/step - loss: 0.0037
1/1 ————— 0s 35ms/step
1/1 ————— 0s 48ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 43ms/step - loss: 0.0022
1/1 ————— 0s 39ms/step - loss: 0.0022
```

Epoch: 110/149 | Loss: 0.0022 | Episodes: 512 | Win count: 5 | Win rate: 0.045 | time: 13.72 minutes

1/1	<div></div>	0s	30ms/step	
1/1	<div></div>	0s	31ms/step	
1/1	<div></div>	0s	35ms/step	
1/1	<div></div>	0s	38ms/step	
1/1	<div></div>	0s	36ms/step	
1/1	<div></div>	0s	30ms/step	
1/1	<div></div>	0s	32ms/step	
1/1	<div></div>	0s	33ms/step	
1/1	<div></div>	0s	38ms/step	
1/1	<div></div>	0s	34ms/step	
1/1	<div></div>	0s	31ms/step	
1/1	<div></div>	0s	33ms/step	
1/1	<div></div>	0s	40ms/step	
1/1	<div></div>	0s	37ms/step	
1/1	<div></div>	0s	35ms/step	
1/1	<div></div>	0s	25ms/step	
1/1	<div></div>	0s	37ms/step	
1/1	<div></div>	0s	39ms/step	
1/1	<div></div>	0s	39ms/step	
1/1	<div></div>	0s	31ms/step	
1/1	<div></div>	0s	56ms/step	- loss: 0.0023
1/1	<div></div>	0s	40ms/step	- loss: 0.0022
1/1	<div></div>	0s	40ms/step	
1/1	<div></div>	0s	44ms/step	
1/1	<div></div>	0s	44ms/step	
1/1	<div></div>	0s	29ms/step	
1/1	<div></div>	0s	36ms/step	
1/1	<div></div>	0s	30ms/step	
1/1	<div></div>	0s	35ms/step	
1/1	<div></div>	0s	46ms/step	
1/1	<div></div>	0s	36ms/step	
1/1	<div></div>	0s	29ms/step	
1/1	<div></div>	0s	36ms/step	
1/1	<div></div>	0s	30ms/step	
1/1	<div></div>	0s	34ms/step	
1/1	<div></div>	0s	36ms/step	
1/1	<div></div>	0s	34ms/step	
1/1	<div></div>	0s	37ms/step	
1/1	<div></div>	0s	34ms/step	
1/1	<div></div>	0s	38ms/step	
1/1	<div></div>	0s	27ms/step	
1/1	<div></div>	0s	33ms/step	
1/1	<div></div>	0s	44ms/step	- loss: 0.0023
1/1	<div></div>	0s	34ms/step	- loss: 0.0022
1/1	<div></div>	0s	27ms/step	
1/1	<div></div>	0s	42ms/step	
1/1	<div></div>	0s	41ms/step	
1/1	<div></div>	0s	31ms/step	
1/1	<div></div>	0s	37ms/step	
1/1	<div></div>	0s	30ms/step	
1/1	<div></div>	0s	31ms/step	
1/1	<div></div>	0s	37ms/step	
1/1	<div></div>	0s	31ms/step	
1/1	<div></div>	0s	34ms/step	

1/1		0s	35ms/step	
1/1		0s	36ms/step	
1/1		0s	35ms/step	
1/1		0s	43ms/step	
1/1		0s	33ms/step	
1/1		0s	36ms/step	
1/1		0s	31ms/step	
1/1		0s	29ms/step	
1/1		0s	38ms/step	
1/1		0s	40ms/step	
1/1		0s	40ms/step	- loss: 0.0022
1/1		0s	37ms/step	- loss: 0.0021
1/1		0s	34ms/step	
1/1		0s	39ms/step	
1/1		0s	34ms/step	
1/1		0s	41ms/step	
1/1		0s	29ms/step	
1/1		0s	33ms/step	
1/1		0s	36ms/step	
1/1		0s	33ms/step	
1/1		0s	32ms/step	
1/1		0s	38ms/step	
1/1		0s	29ms/step	
1/1		0s	27ms/step	
1/1		0s	34ms/step	
1/1		0s	39ms/step	
1/1		0s	39ms/step	
1/1		0s	27ms/step	
1/1		0s	30ms/step	
1/1		0s	32ms/step	
1/1		0s	48ms/step	
1/1		0s	39ms/step	
1/1		0s	37ms/step	- loss: 0.0022
1/1		0s	32ms/step	- loss: 0.0022
1/1		0s	30ms/step	
1/1		0s	36ms/step	
1/1		0s	31ms/step	
1/1		0s	33ms/step	
1/1		0s	29ms/step	
1/1		0s	37ms/step	
1/1		0s	36ms/step	
1/1		0s	39ms/step	
1/1		0s	37ms/step	
1/1		0s	44ms/step	
1/1		0s	29ms/step	
1/1		0s	34ms/step	
1/1		0s	33ms/step	
1/1		0s	30ms/step	
1/1		0s	37ms/step	
1/1		0s	32ms/step	
1/1		0s	41ms/step	
1/1		0s	32ms/step	
1/1		0s	47ms/step	
1/1		0s	34ms/step	
1/1		0s	38ms/step	- loss: 0.0023
1/1		0s	52ms/step	- loss: 0.0022

1/1		0s	29ms/step	
1/1		0s	36ms/step	
1/1		0s	35ms/step	
1/1		0s	36ms/step	
1/1		0s	38ms/step	
1/1		0s	39ms/step	
1/1		0s	34ms/step	
1/1		0s	27ms/step	
1/1		0s	37ms/step	
1/1		0s	33ms/step	
1/1		0s	35ms/step	
1/1		0s	35ms/step	
1/1		0s	36ms/step	
1/1		0s	39ms/step	
1/1		0s	35ms/step	
1/1		0s	44ms/step	
1/1		0s	38ms/step	
1/1		0s	35ms/step	
1/1		0s	30ms/step	
1/1		0s	52ms/step	
1/1		0s	38ms/step	- loss: 0.0018
1/1		0s	33ms/step	- loss: 0.0017
1/1		0s	38ms/step	
1/1		0s	38ms/step	
1/1		0s	32ms/step	
1/1		0s	32ms/step	
1/1		0s	30ms/step	
1/1		0s	44ms/step	
1/1		0s	45ms/step	
1/1		0s	38ms/step	
1/1		0s	32ms/step	
1/1		0s	33ms/step	
1/1		0s	32ms/step	
1/1		0s	36ms/step	
1/1		0s	34ms/step	
1/1		0s	39ms/step	
1/1		0s	33ms/step	
1/1		0s	32ms/step	
1/1		0s	43ms/step	
1/1		0s	32ms/step	
1/1		0s	31ms/step	
1/1		0s	32ms/step	
1/1		0s	36ms/step	- loss: 0.0019
1/1		0s	38ms/step	- loss: 0.0018
1/1		0s	39ms/step	
1/1		0s	35ms/step	
1/1		0s	33ms/step	
1/1		0s	33ms/step	
1/1		0s	52ms/step	
1/1		0s	34ms/step	
1/1		0s	40ms/step	
1/1		0s	36ms/step	
1/1		0s	31ms/step	
1/1		0s	36ms/step	
1/1		0s	30ms/step	
1/1		0s	43ms/step	

```
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 26ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 35ms/step - loss: 0.0037
1/1 ██████████ 0s 42ms/step - loss: 0.0037
Epoch: 111/149 | Loss: 0.0037 | Episodes: 512 | Win count: 5 | Win rate: 0.045 | time: 13.93 minutes
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 47ms/step
1/1 ██████████ 0s 45ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 43ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 47ms/step
1/1 ██████████ 0s 47ms/step - loss: 0.0022
1/1 ██████████ 0s 32ms/step - loss: 0.0022
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 27ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 42ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 42ms/step
1/1 ██████████ 0s 40ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 42ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 30ms/step - loss: 0.0037
1/1 ██████████ 0s 37ms/step - loss: 0.0035
```

```
1/1 ————— 0s 30ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 43ms/step - loss: 0.0022
1/1 ————— 0s 42ms/step - loss: 0.0021
1/1 ————— 0s 34ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 51ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 47ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 47ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 60ms/step - loss: 0.0033
1/1 ————— 0s 46ms/step - loss: 0.0031
Epoch: 112/149 | Loss: 0.0031 | Episodes: 512 | Win count: 5 | Win rate: 0.044 | time: 14.04 minutes
1/1 ————— 0s 57ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 38ms/step
```

1/1	=====	0s	32ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	30ms/step	
1/1	=====	0s	30ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	48ms/step	
1/1	=====	0s	39ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	33ms/step	- loss: 0.0025
1/1	=====	0s	35ms/step	- loss: 0.0024
1/1	=====	0s	45ms/step	
1/1	=====	0s	39ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	35ms/step	
1/1	=====	0s	29ms/step	
1/1	=====	0s	29ms/step	
1/1	=====	0s	28ms/step	
1/1	=====	0s	39ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	44ms/step	
1/1	=====	0s	28ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	28ms/step	
1/1	=====	0s	28ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	30ms/step	
1/1	=====	0s	46ms/step	- loss: 0.0306
1/1	=====	0s	38ms/step	- loss: 0.0300
1/1	=====	0s	31ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	40ms/step	
1/1	=====	0s	40ms/step	
1/1	=====	0s	40ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	37ms/step	
1/1	=====	0s	28ms/step	
1/1	=====	0s	43ms/step	
1/1	=====	0s	37ms/step	
1/1	=====	0s	39ms/step	
1/1	=====	0s	36ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	46ms/step	
1/1	=====	0s	39ms/step	
1/1	=====	0s	39ms/step	
1/1	=====	0s	38ms/step	
1/1	=====	0s	35ms/step	
1/1	=====	0s	35ms/step	
1/1	=====	0s	43ms/step	- loss: 0.0029
1/1	=====	0s	40ms/step	- loss: 0.0029

1/1		0s	35ms/step	
1/1		0s	29ms/step	
1/1		0s	26ms/step	
1/1		0s	29ms/step	
1/1		0s	27ms/step	
1/1		0s	37ms/step	
1/1		0s	51ms/step	
1/1		0s	32ms/step	
1/1		0s	28ms/step	
1/1		0s	37ms/step	
1/1		0s	38ms/step	
1/1		0s	32ms/step	
1/1		0s	31ms/step	
1/1		0s	31ms/step	
1/1		0s	38ms/step	
1/1		0s	40ms/step	
1/1		0s	39ms/step	
1/1		0s	35ms/step	
1/1		0s	28ms/step	
1/1		0s	32ms/step	
1/1		0s	50ms/step	- loss: 0.0353
1/1		0s	35ms/step	- loss: 0.0343
1/1		0s	34ms/step	
1/1		0s	35ms/step	
1/1		0s	31ms/step	
1/1		0s	28ms/step	
1/1		0s	37ms/step	
1/1		0s	37ms/step	
1/1		0s	41ms/step	
1/1		0s	40ms/step	
1/1		0s	55ms/step	
1/1		0s	40ms/step	
1/1		0s	36ms/step	
1/1		0s	43ms/step	
1/1		0s	33ms/step	
1/1		0s	50ms/step	
1/1		0s	31ms/step	
1/1		0s	34ms/step	
1/1		0s	33ms/step	
1/1		0s	31ms/step	
1/1		0s	38ms/step	
1/1		0s	32ms/step	
1/1		0s	38ms/step	- loss: 0.0023
1/1		0s	50ms/step	- loss: 0.0020
1/1		0s	33ms/step	
1/1		0s	29ms/step	
1/1		0s	32ms/step	
1/1		0s	37ms/step	
1/1		0s	38ms/step	
1/1		0s	30ms/step	
1/1		0s	44ms/step	
1/1		0s	34ms/step	
1/1		0s	42ms/step	
1/1		0s	34ms/step	
1/1		0s	32ms/step	
1/1		0s	35ms/step	


```
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 41ms/step
1/1 ██████████ 0s 49ms/step
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 38ms/step - loss: 0.0029
1/1 ██████████ 0s 49ms/step - loss: 0.0028
Epoch: 113/149 | Loss: 0.0028 | Episodes: 512 | Win count: 5 | Win rate: 0.044 | time: 14.21 minutes
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 43ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 40ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 38ms/step - loss: 0.0271
1/1 ██████████ 0s 34ms/step - loss: 0.0264
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 48ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 43ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 33ms/step - loss: 0.0046
1/1 ██████████ 0s 39ms/step - loss: 0.0049
```

1/1		0s	33ms/step	
1/1		0s	40ms/step	
1/1		0s	50ms/step	
1/1		0s	35ms/step	
1/1		0s	33ms/step	
1/1		0s	31ms/step	
1/1		0s	39ms/step	
1/1		0s	33ms/step	
1/1		0s	38ms/step	
1/1		0s	42ms/step	
1/1		0s	38ms/step	
1/1		0s	33ms/step	
1/1		0s	43ms/step	
1/1		0s	31ms/step	
1/1		0s	29ms/step	
1/1		0s	34ms/step	
1/1		0s	32ms/step	
1/1		0s	30ms/step	
1/1		0s	37ms/step	
1/1		0s	33ms/step	
1/1		0s	43ms/step	- loss: 0.0017
1/1		0s	35ms/step	- loss: 0.0018
1/1		0s	44ms/step	
1/1		0s	32ms/step	
1/1		0s	34ms/step	
1/1		0s	27ms/step	
1/1		0s	32ms/step	
1/1		0s	31ms/step	
1/1		0s	36ms/step	
1/1		0s	31ms/step	
1/1		0s	29ms/step	
1/1		0s	35ms/step	
1/1		0s	53ms/step	
1/1		0s	38ms/step	
1/1		0s	35ms/step	
1/1		0s	40ms/step	
1/1		0s	36ms/step	
1/1		0s	27ms/step	
1/1		0s	29ms/step	
1/1		0s	31ms/step	
1/1		0s	34ms/step	
1/1		0s	45ms/step	
1/1		0s	62ms/step	- loss: 0.0054
1/1		0s	41ms/step	- loss: 0.0051
1/1		0s	32ms/step	
1/1		0s	32ms/step	
1/1		0s	29ms/step	
1/1		0s	27ms/step	
1/1		0s	32ms/step	
1/1		0s	34ms/step	
1/1		0s	31ms/step	
1/1		0s	35ms/step	
1/1		0s	46ms/step	
1/1		0s	32ms/step	
1/1		0s	31ms/step	
1/1		0s	28ms/step	

```
1/1 ————— 0s 33ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 46ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 42ms/step - loss: 0.0019
1/1 ————— 0s 34ms/step - loss: 0.0019
1/1 ————— 0s 31ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 51ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 58ms/step - loss: 0.0038
1/1 ————— 0s 40ms/step - loss: 0.0037
Epoch: 114/149 | Loss: 0.0037 | Episodes: 512 | Win count: 5 | Win rate: 0.043 | time: 14.36 minutes
1/1 ————— 0s 29ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 43ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 46ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 54ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 43ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 41ms/step - loss: 0.0299
1/1 ————— 0s 37ms/step - loss: 0.0292
```

1/1		0s	32ms/step	
1/1		0s	31ms/step	
1/1		0s	29ms/step	
1/1		0s	33ms/step	
1/1		0s	30ms/step	
1/1		0s	31ms/step	
1/1		0s	35ms/step	
1/1		0s	35ms/step	
1/1		0s	33ms/step	
1/1		0s	28ms/step	
1/1		0s	42ms/step	
1/1		0s	36ms/step	
1/1		0s	33ms/step	
1/1		0s	28ms/step	
1/1		0s	30ms/step	
1/1		0s	33ms/step	
1/1		0s	38ms/step	
1/1		0s	44ms/step	
1/1		0s	40ms/step	
1/1		0s	43ms/step	
1/1		0s	39ms/step	- loss: 0.0022
1/1		0s	46ms/step	- loss: 0.0023
1/1		0s	34ms/step	
1/1		0s	33ms/step	
1/1		0s	43ms/step	
1/1		0s	29ms/step	
1/1		0s	43ms/step	
1/1		0s	39ms/step	
1/1		0s	29ms/step	
1/1		0s	33ms/step	
1/1		0s	30ms/step	
1/1		0s	40ms/step	
1/1		0s	29ms/step	
1/1		0s	31ms/step	
1/1		0s	38ms/step	
1/1		0s	40ms/step	
1/1		0s	32ms/step	
1/1		0s	31ms/step	
1/1		0s	38ms/step	
1/1		0s	28ms/step	
1/1		0s	33ms/step	
1/1		0s	35ms/step	
1/1		0s	53ms/step	- loss: 0.0073
1/1		0s	36ms/step	- loss: 0.0067
1/1		0s	36ms/step	
1/1		0s	45ms/step	
1/1		0s	28ms/step	
1/1		0s	30ms/step	
1/1		0s	33ms/step	
1/1		0s	29ms/step	
1/1		0s	37ms/step	
1/1		0s	34ms/step	
1/1		0s	30ms/step	
1/1		0s	31ms/step	
1/1		0s	35ms/step	
1/1		0s	44ms/step	

```
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 40ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 36ms/step - loss: 0.0013
1/1 ██████████ 0s 33ms/step - loss: 0.0014
Epoch: 115/149 | Loss: 0.0014 | Episodes: 512 | Win count: 5 | Win rate: 0.043 | tim
e: 14.47 minutes
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 45ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 40ms/step
1/1 ██████████ 0s 45ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 43ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 69ms/step
1/1 ██████████ 0s 43ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 46ms/step - loss: 0.0014
1/1 ██████████ 0s 39ms/step - loss: 0.0014
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 51ms/step
1/1 ██████████ 0s 40ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 48ms/step - loss: 0.0014
1/1 ██████████ 0s 57ms/step - loss: 0.0013
```

1/1		0s	38ms/step	
1/1		0s	32ms/step	
1/1		0s	30ms/step	
1/1		0s	32ms/step	
1/1		0s	32ms/step	
1/1		0s	31ms/step	
1/1		0s	33ms/step	
1/1		0s	30ms/step	
1/1		0s	31ms/step	
1/1		0s	49ms/step	
1/1		0s	36ms/step	
1/1		0s	33ms/step	
1/1		0s	35ms/step	
1/1		0s	33ms/step	
1/1		0s	32ms/step	
1/1		0s	35ms/step	
1/1		0s	41ms/step	
1/1		0s	41ms/step	
1/1		0s	33ms/step	
1/1		0s	39ms/step	
1/1		0s	34ms/step	- loss: 0.0276
1/1		0s	32ms/step	- loss: 0.0265
1/1		0s	35ms/step	
1/1		0s	43ms/step	
1/1		0s	28ms/step	
1/1		0s	34ms/step	
1/1		0s	32ms/step	
1/1		0s	47ms/step	
1/1		0s	33ms/step	
1/1		0s	29ms/step	
1/1		0s	32ms/step	
1/1		0s	47ms/step	
1/1		0s	44ms/step	
1/1		0s	38ms/step	
1/1		0s	34ms/step	
1/1		0s	38ms/step	
1/1		0s	38ms/step	
1/1		0s	35ms/step	
1/1		0s	35ms/step	
1/1		0s	28ms/step	
1/1		0s	31ms/step	
1/1		0s	30ms/step	
1/1		0s	34ms/step	- loss: 0.0029
1/1		0s	36ms/step	- loss: 0.0031
1/1		0s	33ms/step	
1/1		0s	35ms/step	
1/1		0s	49ms/step	
1/1		0s	40ms/step	
1/1		0s	38ms/step	
1/1		0s	37ms/step	
1/1		0s	32ms/step	
1/1		0s	35ms/step	
1/1		0s	31ms/step	
1/1		0s	35ms/step	
1/1		0s	37ms/step	
1/1		0s	36ms/step	

```
1/1 ————— 0s 45ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 48ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 51ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 60ms/step - loss: 0.0031
1/1 ————— 0s 41ms/step - loss: 0.0032
1/1 ————— 0s 38ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 43ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 34ms/step - loss: 0.0029
1/1 ————— 0s 35ms/step - loss: 0.0028
1/1 ————— 0s 31ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 44ms/step
1/1 ————— 0s 42ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 35ms/step - loss: 0.0016
1/1 ————— 0s 35ms/step - loss: 0.0016
```

Epoch: 116/149 | Loss: 0.0016 | Episodes: 512 | Win count: 5 | Win rate: 0.043 | time: 14.65 minutes

1/1		0s	36ms/step	
1/1		0s	30ms/step	
1/1		0s	39ms/step	
1/1		0s	32ms/step	
1/1		0s	36ms/step	
1/1		0s	48ms/step	
1/1		0s	39ms/step	
1/1		0s	33ms/step	
1/1		0s	33ms/step	
1/1		0s	29ms/step	
1/1		0s	37ms/step	
1/1		0s	30ms/step	
1/1		0s	31ms/step	
1/1		0s	33ms/step	
1/1		0s	32ms/step	
1/1		0s	36ms/step	
1/1		0s	37ms/step	
1/1		0s	29ms/step	
1/1		0s	31ms/step	
1/1		0s	30ms/step	
1/1		0s	34ms/step	- loss: 0.0023
1/1		0s	38ms/step	- loss: 0.0022
1/1		0s	45ms/step	
1/1		0s	51ms/step	
1/1		0s	41ms/step	
1/1		0s	52ms/step	
1/1		0s	39ms/step	
1/1		0s	33ms/step	
1/1		0s	33ms/step	
1/1		0s	32ms/step	
1/1		0s	31ms/step	
1/1		0s	35ms/step	
1/1		0s	34ms/step	
1/1		0s	35ms/step	
1/1		0s	32ms/step	
1/1		0s	39ms/step	
1/1		0s	31ms/step	
1/1		0s	36ms/step	
1/1		0s	38ms/step	
1/1		0s	34ms/step	
1/1		0s	36ms/step	
1/1		0s	35ms/step	
1/1		0s	36ms/step	- loss: 0.0043
1/1		0s	36ms/step	- loss: 0.0041
1/1		0s	36ms/step	
1/1		0s	35ms/step	
1/1		0s	45ms/step	
1/1		0s	36ms/step	
1/1		0s	33ms/step	
1/1		0s	30ms/step	
1/1		0s	26ms/step	
1/1		0s	33ms/step	
1/1		0s	30ms/step	
1/1		0s	35ms/step	
1/1		0s	38ms/step	
1/1		0s	33ms/step	


```
1/1 ██████████ 0s 48ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 41ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 37ms/step - loss: 0.0046
1/1 ██████████ 0s 36ms/step - loss: 0.0041
1/1 ██████████ 0s 45ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 45ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 40ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 40ms/step - loss: 0.0026
1/1 ██████████ 0s 40ms/step - loss: 0.0026
Epoch: 117/149 | Loss: 0.0026 | Episodes: 512 | Win count: 5 | Win rate: 0.042 | time: 14.76 minutes
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 40ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 42ms/step
1/1 ██████████ 0s 53ms/step
1/1 ██████████ 0s 52ms/step - loss: 0.0022
1/1 ██████████ 0s 35ms/step - loss: 0.0022
```

1/1		0s	40ms/step	
1/1		0s	36ms/step	
1/1		0s	39ms/step	
1/1		0s	38ms/step	
1/1		0s	37ms/step	
1/1		0s	35ms/step	
1/1		0s	47ms/step	
1/1		0s	35ms/step	
1/1		0s	32ms/step	
1/1		0s	36ms/step	
1/1		0s	37ms/step	
1/1		0s	39ms/step	
1/1		0s	33ms/step	
1/1		0s	34ms/step	
1/1		0s	28ms/step	
1/1		0s	35ms/step	
1/1		0s	31ms/step	
1/1		0s	34ms/step	
1/1		0s	34ms/step	
1/1		0s	32ms/step	
1/1		0s	39ms/step	- loss: 0.0024
1/1		0s	33ms/step	- loss: 0.0024
1/1		0s	33ms/step	
1/1		0s	30ms/step	
1/1		0s	28ms/step	
1/1		0s	34ms/step	
1/1		0s	38ms/step	
1/1		0s	33ms/step	
1/1		0s	34ms/step	
1/1		0s	36ms/step	
1/1		0s	42ms/step	
1/1		0s	34ms/step	
1/1		0s	30ms/step	
1/1		0s	34ms/step	
1/1		0s	31ms/step	
1/1		0s	31ms/step	
1/1		0s	31ms/step	
1/1		0s	39ms/step	
1/1		0s	50ms/step	
1/1		0s	29ms/step	
1/1		0s	53ms/step	
1/1		0s	46ms/step	
1/1		0s	47ms/step	- loss: 0.0027
1/1		0s	39ms/step	- loss: 0.0028
1/1		0s	38ms/step	
1/1		0s	46ms/step	
1/1		0s	27ms/step	
1/1		0s	32ms/step	
1/1		0s	30ms/step	
1/1		0s	37ms/step	
1/1		0s	37ms/step	
1/1		0s	31ms/step	
1/1		0s	33ms/step	
1/1		0s	36ms/step	
1/1		0s	33ms/step	
1/1		0s	36ms/step	

```
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 44ms/step - loss: 0.0034
1/1 ██████████ 0s 36ms/step - loss: 0.0031
Epoch: 118/149 | Loss: 0.0031 | Episodes: 512 | Win count: 5 | Win rate: 0.042 | time: 14.87 minutes
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 41ms/step
1/1 ██████████ 0s 62ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 46ms/step
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 40ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 55ms/step - loss: 0.0027
1/1 ██████████ 0s 34ms/step - loss: 0.0026
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 41ms/step - loss: 0.0028
1/1 ██████████ 0s 39ms/step - loss: 0.0028
```

1/1		0s	37ms/step	
1/1		0s	36ms/step	
1/1		0s	29ms/step	
1/1		0s	31ms/step	
1/1		0s	34ms/step	
1/1		0s	34ms/step	
1/1		0s	53ms/step	
1/1		0s	45ms/step	
1/1		0s	33ms/step	
1/1		0s	33ms/step	
1/1		0s	31ms/step	
1/1		0s	32ms/step	
1/1		0s	35ms/step	
1/1		0s	28ms/step	
1/1		0s	34ms/step	
1/1		0s	37ms/step	
1/1		0s	48ms/step	
1/1		0s	27ms/step	
1/1		0s	33ms/step	
1/1		0s	28ms/step	
1/1		0s	42ms/step	loss: 0.0021
1/1		0s	44ms/step	loss: 0.0022
1/1		0s	33ms/step	
1/1		0s	32ms/step	
1/1		0s	30ms/step	
1/1		0s	33ms/step	
1/1		0s	32ms/step	
1/1		0s	44ms/step	
1/1		0s	33ms/step	
1/1		0s	32ms/step	
1/1		0s	33ms/step	
1/1		0s	28ms/step	
1/1		0s	38ms/step	
1/1		0s	35ms/step	
1/1		0s	33ms/step	
1/1		0s	29ms/step	
1/1		0s	31ms/step	
1/1		0s	46ms/step	
1/1		0s	34ms/step	
1/1		0s	36ms/step	
1/1		0s	32ms/step	
1/1		0s	32ms/step	
1/1		0s	48ms/step	loss: 0.0025
1/1		0s	35ms/step	loss: 0.0024
1/1		0s	38ms/step	
1/1		0s	35ms/step	
1/1		0s	38ms/step	
1/1		0s	34ms/step	
1/1		0s	40ms/step	
1/1		0s	35ms/step	
1/1		0s	31ms/step	
1/1		0s	36ms/step	
1/1		0s	30ms/step	
1/1		0s	39ms/step	
1/1		0s	36ms/step	
1/1		0s	34ms/step	

```
1/1 ————— 0s 32ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 39ms/step - loss: 0.0019
1/1 ————— 0s 36ms/step - loss: 0.0018
1/1 ————— 0s 40ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 52ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 44ms/step
1/1 ————— 0s 44ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 56ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 42ms/step
1/1 ————— 0s 49ms/step - loss: 0.0027
1/1 ————— 0s 38ms/step - loss: 0.0028
1/1 ————— 0s 36ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 47ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 50ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 47ms/step
1/1 ————— 0s 74ms/step - loss: 0.0031
1/1 ————— 0s 41ms/step - loss: 0.0031
Epoch: 119/149 | Loss: 0.0031 | Episodes: 512 | Win count: 5 | Win rate: 0.042 | time: 15.06 minutes
```

1/1		0s	38ms/step	
1/1		0s	40ms/step	
1/1		0s	38ms/step	
1/1		0s	40ms/step	
1/1		0s	40ms/step	
1/1		0s	45ms/step	
1/1		0s	37ms/step	
1/1		0s	34ms/step	
1/1		0s	41ms/step	
1/1		0s	37ms/step	
1/1		0s	43ms/step	
1/1		0s	37ms/step	
1/1		0s	34ms/step	
1/1		0s	43ms/step	
1/1		0s	35ms/step	
1/1		0s	35ms/step	
1/1		0s	38ms/step	
1/1		0s	41ms/step	
1/1		0s	38ms/step	
1/1		0s	37ms/step	
1/1		0s	36ms/step	loss: 0.0028
1/1		0s	46ms/step	loss: 0.0027
1/1		0s	35ms/step	
1/1		0s	32ms/step	
1/1		0s	34ms/step	
1/1		0s	33ms/step	
1/1		0s	30ms/step	
1/1		0s	34ms/step	
1/1		0s	36ms/step	
1/1		0s	34ms/step	
1/1		0s	33ms/step	
1/1		0s	38ms/step	
1/1		0s	34ms/step	
1/1		0s	31ms/step	
1/1		0s	31ms/step	
1/1		0s	48ms/step	
1/1		0s	32ms/step	
1/1		0s	29ms/step	
1/1		0s	35ms/step	
1/1		0s	35ms/step	
1/1		0s	29ms/step	
1/1		0s	33ms/step	
1/1		0s	34ms/step	loss: 0.0346
1/1		0s	40ms/step	loss: 0.0332
1/1		0s	69ms/step	
1/1		0s	32ms/step	
1/1		0s	36ms/step	
1/1		0s	46ms/step	
1/1		0s	31ms/step	
1/1		0s	30ms/step	
1/1		0s	43ms/step	
1/1		0s	39ms/step	
1/1		0s	30ms/step	
1/1		0s	33ms/step	
1/1		0s	35ms/step	
1/1		0s	31ms/step	

```
1/1 0s 27ms/step
1/1 0s 38ms/step
1/1 0s 39ms/step
1/1 0s 29ms/step
1/1 0s 38ms/step
1/1 0s 28ms/step
1/1 0s 30ms/step
1/1 0s 35ms/step
1/1 0s 39ms/step - loss: 0.0032
1/1 0s 37ms/step - loss: 0.0032
1/1 0s 38ms/step
1/1 0s 48ms/step
1/1 0s 33ms/step
1/1 0s 30ms/step
1/1 0s 38ms/step
1/1 0s 42ms/step
1/1 0s 42ms/step
1/1 0s 59ms/step
1/1 0s 30ms/step
1/1 0s 29ms/step
1/1 0s 31ms/step
1/1 0s 30ms/step
1/1 0s 35ms/step
1/1 0s 30ms/step
1/1 0s 35ms/step
1/1 0s 33ms/step
1/1 0s 31ms/step
1/1 0s 37ms/step
1/1 0s 36ms/step
1/1 0s 33ms/step
1/1 0s 35ms/step - loss: 0.0019
1/1 0s 39ms/step - loss: 0.0021
Epoch: 120/149 | Loss: 0.0021 | Episodes: 512 | Win count: 5 | Win rate: 0.041 | time: 15.17 minutes
1/1 0s 34ms/step
1/1 0s 37ms/step
1/1 0s 37ms/step
1/1 0s 32ms/step
1/1 0s 44ms/step
1/1 0s 33ms/step
1/1 0s 32ms/step
1/1 0s 29ms/step
1/1 0s 45ms/step
1/1 0s 30ms/step
1/1 0s 30ms/step
1/1 0s 34ms/step
1/1 0s 39ms/step
1/1 0s 41ms/step
1/1 0s 29ms/step
1/1 0s 53ms/step
1/1 0s 36ms/step
1/1 0s 36ms/step
1/1 0s 38ms/step
1/1 0s 35ms/step
1/1 0s 36ms/step - loss: 0.0022
1/1 0s 56ms/step - loss: 0.0021
```

1/1		0s	37ms/step	
1/1		0s	43ms/step	
1/1		0s	57ms/step	
1/1		0s	35ms/step	
1/1		0s	29ms/step	
1/1		0s	37ms/step	
1/1		0s	34ms/step	
1/1		0s	34ms/step	
1/1		0s	33ms/step	
1/1		0s	36ms/step	
1/1		0s	36ms/step	
1/1		0s	35ms/step	
1/1		0s	41ms/step	
1/1		0s	35ms/step	
1/1		0s	28ms/step	
1/1		0s	28ms/step	
1/1		0s	39ms/step	
1/1		0s	39ms/step	
1/1		0s	29ms/step	
1/1		0s	32ms/step	
1/1		0s	48ms/step	- loss: 0.0024
1/1		0s	31ms/step	- loss: 0.0026
1/1		0s	44ms/step	
1/1		0s	49ms/step	
1/1		0s	36ms/step	
1/1		0s	39ms/step	
1/1		0s	31ms/step	
1/1		0s	28ms/step	
1/1		0s	29ms/step	
1/1		0s	37ms/step	
1/1		0s	37ms/step	
1/1		0s	39ms/step	
1/1		0s	33ms/step	
1/1		0s	35ms/step	
1/1		0s	29ms/step	
1/1		0s	25ms/step	
1/1		0s	34ms/step	
1/1		0s	30ms/step	
1/1		0s	37ms/step	
1/1		0s	34ms/step	
1/1		0s	40ms/step	
1/1		0s	34ms/step	
1/1		0s	34ms/step	- loss: 0.0028
1/1		0s	48ms/step	- loss: 0.0028
1/1		0s	26ms/step	
1/1		0s	36ms/step	
1/1		0s	32ms/step	
1/1		0s	30ms/step	
1/1		0s	36ms/step	
1/1		0s	36ms/step	
1/1		0s	33ms/step	
1/1		0s	33ms/step	
1/1		0s	35ms/step	
1/1		0s	34ms/step	
1/1		0s	30ms/step	
1/1		0s	32ms/step	


```
1/1 ————— 0s 39ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 50ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 54ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 38ms/step - loss: 0.0039
1/1 ————— 0s 32ms/step - loss: 0.0040
1/1 ————— 0s 30ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 47ms/step
1/1 ————— 0s 42ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 42ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 47ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 56ms/step
1/1 ————— 0s 52ms/step - loss: 0.0031
1/1 ————— 0s 60ms/step - loss: 0.0030
1/1 ————— 0s 49ms/step
1/1 ————— 0s 66ms/step
1/1 ————— 0s 43ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 37ms/step - loss: 0.0031
1/1 ————— 0s 38ms/step - loss: 0.0030
```

Epoch: 121/149 | Loss: 0.0030 | Episodes: 512 | Win count: 5 | Win rate: 0.041 | time: 15.33 minutes

1/1		0s	36ms/step	
1/1		0s	33ms/step	
1/1		0s	28ms/step	
1/1		0s	29ms/step	
1/1		0s	32ms/step	
1/1		0s	37ms/step	
1/1		0s	34ms/step	
1/1		0s	35ms/step	
1/1		0s	38ms/step	
1/1		0s	33ms/step	
1/1		0s	34ms/step	
1/1		0s	64ms/step	
1/1		0s	34ms/step	
1/1		0s	53ms/step	
1/1		0s	34ms/step	
1/1		0s	34ms/step	
1/1		0s	35ms/step	
1/1		0s	36ms/step	
1/1		0s	36ms/step	
1/1		0s	40ms/step	
1/1		0s	42ms/step	- loss: 0.0034
1/1		0s	36ms/step	- loss: 0.0031
1/1		0s	33ms/step	
1/1		0s	35ms/step	
1/1		0s	32ms/step	
1/1		0s	48ms/step	
1/1		0s	41ms/step	
1/1		0s	47ms/step	
1/1		0s	32ms/step	
1/1		0s	30ms/step	
1/1		0s	34ms/step	
1/1		0s	32ms/step	
1/1		0s	34ms/step	
1/1		0s	37ms/step	
1/1		0s	33ms/step	
1/1		0s	35ms/step	
1/1		0s	37ms/step	
1/1		0s	33ms/step	
1/1		0s	28ms/step	
1/1		0s	34ms/step	
1/1		0s	35ms/step	
1/1		0s	33ms/step	
1/1		0s	36ms/step	- loss: 0.0029
1/1		0s	45ms/step	- loss: 0.0028
1/1		0s	30ms/step	
1/1		0s	34ms/step	
1/1		0s	35ms/step	
1/1		0s	33ms/step	
1/1		0s	31ms/step	
1/1		0s	33ms/step	
1/1		0s	42ms/step	
1/1		0s	31ms/step	
1/1		0s	32ms/step	
1/1		0s	33ms/step	
1/1		0s	46ms/step	
1/1		0s	33ms/step	

```
1/1 ————— 0s 38ms/step
1/1 ————— 0s 42ms/step
1/1 ————— 0s 49ms/step
1/1 ————— 0s 50ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 34ms/step - loss: 0.0026
1/1 ————— 0s 33ms/step - loss: 0.0025
1/1 ————— 0s 35ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 52ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 39ms/step - loss: 0.0027
1/1 ————— 0s 38ms/step - loss: 0.0026
1/1 ————— 0s 33ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 52ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 42ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 38ms/step - loss: 0.0021
1/1 ————— 0s 44ms/step - loss: 0.0021
Epoch: 122/149 | Loss: 0.0021 | Episodes: 512 | Win count: 5 | Win rate: 0.041 | time: 15.47 minutes
```

1/1		0s	31ms/step	
1/1		0s	38ms/step	
1/1		0s	31ms/step	
1/1		0s	31ms/step	
1/1		0s	34ms/step	
1/1		0s	32ms/step	
1/1		0s	39ms/step	
1/1		0s	31ms/step	
1/1		0s	37ms/step	
1/1		0s	33ms/step	
1/1		0s	31ms/step	
1/1		0s	49ms/step	
1/1		0s	30ms/step	
1/1		0s	32ms/step	
1/1		0s	34ms/step	
1/1		0s	44ms/step	
1/1		0s	45ms/step	
1/1		0s	34ms/step	
1/1		0s	48ms/step	
1/1		0s	45ms/step	
1/1		0s	35ms/step	- loss: 0.0035
1/1		0s	37ms/step	- loss: 0.0032
1/1		0s	28ms/step	
1/1		0s	42ms/step	
1/1		0s	32ms/step	
1/1		0s	31ms/step	
1/1		0s	34ms/step	
1/1		0s	35ms/step	
1/1		0s	38ms/step	
1/1		0s	41ms/step	
1/1		0s	39ms/step	
1/1		0s	45ms/step	
1/1		0s	43ms/step	
1/1		0s	54ms/step	
1/1		0s	40ms/step	
1/1		0s	41ms/step	
1/1		0s	38ms/step	
1/1		0s	37ms/step	
1/1		0s	36ms/step	
1/1		0s	40ms/step	
1/1		0s	33ms/step	
1/1		0s	36ms/step	
1/1		0s	41ms/step	- loss: 0.0039
1/1		0s	37ms/step	- loss: 0.0039
1/1		0s	34ms/step	
1/1		0s	40ms/step	
1/1		0s	48ms/step	
1/1		0s	42ms/step	
1/1		0s	34ms/step	
1/1		0s	32ms/step	
1/1		0s	33ms/step	
1/1		0s	35ms/step	
1/1		0s	31ms/step	
1/1		0s	33ms/step	
1/1		0s	40ms/step	
1/1		0s	32ms/step	

1/1	0s	39ms/step	
1/1	0s	37ms/step	
1/1	0s	34ms/step	
1/1	0s	32ms/step	
1/1	0s	50ms/step	
1/1	0s	33ms/step	
1/1	0s	34ms/step	
1/1	0s	38ms/step	
1/1	0s	53ms/step	loss: 0.0024
1/1	0s	36ms/step	loss: 0.0024
1/1	0s	32ms/step	
1/1	0s	43ms/step	
1/1	0s	29ms/step	
1/1	0s	33ms/step	
1/1	0s	31ms/step	
1/1	0s	35ms/step	
1/1	0s	35ms/step	
1/1	0s	33ms/step	
1/1	0s	50ms/step	
1/1	0s	42ms/step	
1/1	0s	38ms/step	
1/1	0s	42ms/step	
1/1	0s	40ms/step	
1/1	0s	50ms/step	
1/1	0s	34ms/step	
1/1	0s	29ms/step	
1/1	0s	31ms/step	
1/1	0s	40ms/step	
1/1	0s	34ms/step	
1/1	0s	32ms/step	
1/1	0s	36ms/step	loss: 0.0036
1/1	0s	37ms/step	loss: 0.0036
1/1	0s	32ms/step	
1/1	0s	35ms/step	
1/1	0s	27ms/step	
1/1	0s	35ms/step	
1/1	0s	31ms/step	
1/1	0s	41ms/step	
1/1	0s	34ms/step	
1/1	0s	35ms/step	
1/1	0s	39ms/step	
1/1	0s	46ms/step	
1/1	0s	32ms/step	
1/1	0s	36ms/step	
1/1	0s	30ms/step	
1/1	0s	39ms/step	
1/1	0s	31ms/step	
1/1	0s	29ms/step	
1/1	0s	35ms/step	
1/1	0s	30ms/step	
1/1	0s	30ms/step	
1/1	0s	35ms/step	
1/1	0s	32ms/step	loss: 0.0037
1/1	0s	44ms/step	loss: 0.0036
1/1	0s	34ms/step	
1/1	0s	72ms/step	

1/1	0s	37ms/step	
1/1	0s	50ms/step	
1/1	0s	39ms/step	
1/1	0s	36ms/step	
1/1	0s	33ms/step	
1/1	0s	33ms/step	
1/1	0s	34ms/step	
1/1	0s	34ms/step	
1/1	0s	29ms/step	
1/1	0s	28ms/step	
1/1	0s	34ms/step	
1/1	0s	26ms/step	
1/1	0s	33ms/step	
1/1	0s	31ms/step	
1/1	0s	27ms/step	
1/1	0s	36ms/step	
1/1	0s	42ms/step	
1/1	0s	39ms/step	
1/1	0s	35ms/step	loss: 0.0308
1/1	0s	36ms/step	loss: 0.0304
1/1	0s	33ms/step	
1/1	0s	34ms/step	
1/1	0s	27ms/step	
1/1	0s	50ms/step	
1/1	0s	41ms/step	
1/1	0s	33ms/step	
1/1	0s	30ms/step	
1/1	0s	38ms/step	
1/1	0s	38ms/step	
1/1	0s	38ms/step	
1/1	0s	33ms/step	
1/1	0s	31ms/step	
1/1	0s	46ms/step	
1/1	0s	39ms/step	
1/1	0s	30ms/step	
1/1	0s	34ms/step	
1/1	0s	42ms/step	
1/1	0s	47ms/step	
1/1	0s	37ms/step	
1/1	0s	40ms/step	
1/1	0s	42ms/step	loss: 0.0024
1/1	0s	40ms/step	loss: 0.0023
1/1	0s	34ms/step	
1/1	0s	31ms/step	
1/1	0s	32ms/step	
1/1	0s	33ms/step	
1/1	0s	31ms/step	
1/1	0s	31ms/step	
1/1	0s	42ms/step	
1/1	0s	36ms/step	
1/1	0s	29ms/step	
1/1	0s	35ms/step	
1/1	0s	35ms/step	
1/1	0s	30ms/step	
1/1	0s	32ms/step	
1/1	0s	37ms/step	

```
1/1 ————— 0s 36ms/step
1/1 ————— 0s 50ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 35ms/step - loss: 0.0027
1/1 ————— 0s 38ms/step - loss: 0.0026
Epoch: 123/149 | Loss: 0.0026 | Episodes: 512 | Win count: 5 | Win rate: 0.040 | time: 15.69 minutes
1/1 ————— 0s 43ms/step
1/1 ————— 0s 44ms/step
1/1 ————— 0s 46ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 43ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 56ms/step
1/1 ————— 0s 46ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 40ms/step - loss: 0.0028
1/1 ————— 0s 44ms/step - loss: 0.0026
1/1 ————— 0s 29ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 48ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 42ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 38ms/step - loss: 0.0031
1/1 ————— 0s 38ms/step - loss: 0.0029
1/1 ————— 0s 27ms/step
1/1 ————— 0s 37ms/step
```

1/1	0s	70ms/step	
1/1	0s	40ms/step	
1/1	0s	42ms/step	
1/1	0s	47ms/step	
1/1	0s	42ms/step	
1/1	0s	37ms/step	
1/1	0s	30ms/step	
1/1	0s	31ms/step	
1/1	0s	32ms/step	
1/1	0s	33ms/step	
1/1	0s	39ms/step	
1/1	0s	28ms/step	
1/1	0s	32ms/step	
1/1	0s	33ms/step	
1/1	0s	48ms/step	
1/1	0s	34ms/step	
1/1	0s	30ms/step	
1/1	0s	32ms/step	
1/1	0s	45ms/step	loss: 0.0018
1/1	0s	38ms/step	loss: 0.0017
1/1	0s	37ms/step	
1/1	0s	36ms/step	
1/1	0s	37ms/step	
1/1	0s	35ms/step	
1/1	0s	35ms/step	
1/1	0s	31ms/step	
1/1	0s	35ms/step	
1/1	0s	31ms/step	
1/1	0s	32ms/step	
1/1	0s	32ms/step	
1/1	0s	34ms/step	
1/1	0s	33ms/step	
1/1	0s	27ms/step	
1/1	0s	32ms/step	
1/1	0s	38ms/step	
1/1	0s	43ms/step	
1/1	0s	37ms/step	
1/1	0s	35ms/step	
1/1	0s	33ms/step	
1/1	0s	48ms/step	
1/1	0s	43ms/step	loss: 0.0029
1/1	0s	43ms/step	loss: 0.0031
1/1	0s	38ms/step	
1/1	0s	29ms/step	
1/1	0s	33ms/step	
1/1	0s	35ms/step	
1/1	0s	39ms/step	
1/1	0s	26ms/step	
1/1	0s	34ms/step	
1/1	0s	39ms/step	
1/1	0s	28ms/step	
1/1	0s	31ms/step	
1/1	0s	39ms/step	
1/1	0s	36ms/step	
1/1	0s	34ms/step	
1/1	0s	28ms/step	

1/1		0s	39ms/step	
1/1		0s	38ms/step	
1/1		0s	32ms/step	
1/1		0s	30ms/step	
1/1		0s	36ms/step	
1/1		0s	37ms/step	
1/1		0s	36ms/step	- loss: 0.0021
1/1		0s	48ms/step	- loss: 0.0021
1/1		0s	25ms/step	
1/1		0s	30ms/step	
1/1		0s	42ms/step	
1/1		0s	33ms/step	
1/1		0s	41ms/step	
1/1		0s	38ms/step	
1/1		0s	34ms/step	
1/1		0s	36ms/step	
1/1		0s	32ms/step	
1/1		0s	36ms/step	
1/1		0s	36ms/step	
1/1		0s	27ms/step	
1/1		0s	31ms/step	
1/1		0s	37ms/step	
1/1		0s	33ms/step	
1/1		0s	31ms/step	
1/1		0s	27ms/step	
1/1		0s	33ms/step	
1/1		0s	32ms/step	
1/1		0s	36ms/step	
1/1		0s	35ms/step	- loss: 0.0037
1/1		0s	29ms/step	- loss: 0.0036
1/1		0s	38ms/step	
1/1		0s	47ms/step	
1/1		0s	30ms/step	
1/1		0s	35ms/step	
1/1		0s	35ms/step	
1/1		0s	33ms/step	
1/1		0s	39ms/step	
1/1		0s	31ms/step	
1/1		0s	34ms/step	
1/1		0s	35ms/step	
1/1		0s	31ms/step	
1/1		0s	35ms/step	
1/1		0s	31ms/step	
1/1		0s	40ms/step	
1/1		0s	49ms/step	
1/1		0s	51ms/step	
1/1		0s	36ms/step	
1/1		0s	48ms/step	
1/1		0s	27ms/step	
1/1		0s	32ms/step	
1/1		0s	56ms/step	- loss: 0.0293
1/1		0s	40ms/step	- loss: 0.0289
1/1		0s	31ms/step	
1/1		0s	32ms/step	
1/1		0s	35ms/step	
1/1		0s	34ms/step	

```
1/1 ————— 0s 32ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 47ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 45ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 53ms/step - loss: 0.0035
1/1 ————— 0s 34ms/step - loss: 0.0035
Epoch: 124/149 | Loss: 0.0035 | Episodes: 512 | Win count: 5 | Win rate: 0.040 | time: 15.91 minutes
1/1 ————— 0s 33ms/step
1/1 ————— 0s 46ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 55ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 51ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 46ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 42ms/step
1/1 ————— 0s 48ms/step - loss: 0.0032
1/1 ————— 0s 42ms/step - loss: 0.0029
1/1 ————— 0s 37ms/step
1/1 ————— 0s 48ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 50ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 45ms/step
1/1 ————— 0s 42ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 35ms/step
```

1/1	0s	39ms/step	
1/1	0s	42ms/step	
1/1	0s	52ms/step	
1/1	0s	46ms/step	
1/1	0s	57ms/step	
1/1	0s	41ms/step	
1/1	0s	54ms/step	- loss: 0.0030
1/1	0s	57ms/step	- loss: 0.0030
1/1	0s	33ms/step	
1/1	0s	36ms/step	
1/1	0s	37ms/step	
1/1	0s	37ms/step	
1/1	0s	33ms/step	
1/1	0s	30ms/step	
1/1	0s	36ms/step	
1/1	0s	38ms/step	
1/1	0s	46ms/step	
1/1	0s	36ms/step	
1/1	0s	39ms/step	
1/1	0s	33ms/step	
1/1	0s	29ms/step	
1/1	0s	31ms/step	
1/1	0s	29ms/step	
1/1	0s	33ms/step	
1/1	0s	31ms/step	
1/1	0s	42ms/step	
1/1	0s	45ms/step	
1/1	0s	38ms/step	
1/1	0s	41ms/step	- loss: 0.0015
1/1	0s	42ms/step	- loss: 0.0015
1/1	0s	33ms/step	
1/1	0s	30ms/step	
1/1	0s	35ms/step	
1/1	0s	30ms/step	
1/1	0s	49ms/step	
1/1	0s	40ms/step	
1/1	0s	32ms/step	
1/1	0s	36ms/step	
1/1	0s	32ms/step	
1/1	0s	28ms/step	
1/1	0s	28ms/step	
1/1	0s	35ms/step	
1/1	0s	34ms/step	
1/1	0s	50ms/step	
1/1	0s	35ms/step	
1/1	0s	32ms/step	
1/1	0s	32ms/step	
1/1	0s	31ms/step	
1/1	0s	31ms/step	
1/1	0s	27ms/step	
1/1	0s	34ms/step	- loss: 0.0021
1/1	0s	46ms/step	- loss: 0.0021
1/1	0s	44ms/step	
1/1	0s	33ms/step	
1/1	0s	30ms/step	
1/1	0s	33ms/step	

```
1/1 26ms/step
1/1 36ms/step
1/1 46ms/step
1/1 54ms/step
1/1 54ms/step
1/1 51ms/step
1/1 37ms/step
1/1 46ms/step
1/1 44ms/step
1/1 44ms/step
1/1 36ms/step
1/1 32ms/step
1/1 31ms/step
1/1 32ms/step
1/1 48ms/step
1/1 35ms/step
1/1 36ms/step - loss: 0.0325
1/1 36ms/step - loss: 0.0318
Epoch: 125/149 | Loss: 0.0318 | Episodes: 512 | Win count: 5 | Win rate: 0.040 | time: 16.06 minutes
1/1 54ms/step
1/1 39ms/step
1/1 39ms/step
1/1 30ms/step
1/1 33ms/step
1/1 35ms/step
1/1 39ms/step
1/1 32ms/step
1/1 34ms/step
1/1 31ms/step
1/1 32ms/step
1/1 36ms/step
1/1 38ms/step
1/1 36ms/step
1/1 31ms/step
1/1 44ms/step
1/1 32ms/step
1/1 39ms/step
1/1 39ms/step
1/1 39ms/step
1/1 32ms/step - loss: 0.0031
1/1 39ms/step - loss: 0.0029
1/1 60ms/step
1/1 32ms/step
1/1 36ms/step
1/1 41ms/step
1/1 32ms/step
1/1 52ms/step
1/1 32ms/step
1/1 29ms/step
1/1 36ms/step
1/1 29ms/step
1/1 35ms/step
1/1 34ms/step
1/1 30ms/step
1/1 37ms/step
```

1/1		0s	35ms/step	
1/1		0s	47ms/step	
1/1		0s	33ms/step	
1/1		0s	31ms/step	
1/1		0s	32ms/step	
1/1		0s	26ms/step	
1/1		0s	35ms/step	- loss: 0.0031
1/1		0s	35ms/step	- loss: 0.0031
1/1		0s	31ms/step	
1/1		0s	28ms/step	
1/1		0s	44ms/step	
1/1		0s	34ms/step	
1/1		0s	33ms/step	
1/1		0s	36ms/step	
1/1		0s	45ms/step	
1/1		0s	35ms/step	
1/1		0s	32ms/step	
1/1		0s	32ms/step	
1/1		0s	33ms/step	
1/1		0s	36ms/step	
1/1		0s	30ms/step	
1/1		0s	36ms/step	
1/1		0s	34ms/step	
1/1		0s	28ms/step	
1/1		0s	35ms/step	
1/1		0s	33ms/step	
1/1		0s	37ms/step	
1/1		0s	29ms/step	
1/1		0s	38ms/step	- loss: 0.0295
1/1		0s	39ms/step	- loss: 0.0292
1/1		0s	49ms/step	
1/1		0s	53ms/step	
1/1		0s	41ms/step	
1/1		0s	43ms/step	
1/1		0s	39ms/step	
1/1		0s	51ms/step	
1/1		0s	35ms/step	
1/1		0s	36ms/step	
1/1		0s	32ms/step	
1/1		0s	30ms/step	
1/1		0s	34ms/step	
1/1		0s	28ms/step	
1/1		0s	35ms/step	
1/1		0s	49ms/step	
1/1		0s	40ms/step	
1/1		0s	45ms/step	
1/1		0s	38ms/step	
1/1		0s	30ms/step	
1/1		0s	26ms/step	
1/1		0s	43ms/step	
1/1		0s	39ms/step	- loss: 0.0027
1/1		0s	42ms/step	- loss: 0.0027
1/1		0s	32ms/step	
1/1		0s	27ms/step	
1/1		0s	34ms/step	
1/1		0s	29ms/step	

```
1/1 ————— 0s 35ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 69ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 40ms/step - loss: 0.0029
1/1 ————— 0s 40ms/step - loss: 0.0029
1/1 ————— 0s 35ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 49ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 48ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 42ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 37ms/step - loss: 0.0033
1/1 ————— 0s 49ms/step - loss: 0.0033
Epoch: 126/149 | Loss: 0.0033 | Episodes: 512 | Win count: 5 | Win rate: 0.039 | time: 16.22 minutes
1/1 ————— 0s 38ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 43ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 38ms/step
```

1/1		0s	38ms/step	
1/1		0s	48ms/step	
1/1		0s	34ms/step	
1/1		0s	34ms/step	
1/1		0s	33ms/step	
1/1		0s	32ms/step	
1/1		0s	55ms/step	- loss: 0.0042
1/1		0s	38ms/step	- loss: 0.0041
1/1		0s	33ms/step	
1/1		0s	32ms/step	
1/1		0s	33ms/step	
1/1		0s	27ms/step	
1/1		0s	30ms/step	
1/1		0s	33ms/step	
1/1		0s	30ms/step	
1/1		0s	36ms/step	
1/1		0s	36ms/step	
1/1		0s	36ms/step	
1/1		0s	36ms/step	
1/1		0s	39ms/step	
1/1		0s	31ms/step	
1/1		0s	39ms/step	
1/1		0s	41ms/step	
1/1		0s	33ms/step	
1/1		0s	33ms/step	
1/1		0s	30ms/step	
1/1		0s	31ms/step	
1/1		0s	29ms/step	
1/1		0s	39ms/step	- loss: 0.0051
1/1		0s	44ms/step	- loss: 0.0047
1/1		0s	41ms/step	
1/1		0s	34ms/step	
1/1		0s	37ms/step	
1/1		0s	36ms/step	
1/1		0s	37ms/step	
1/1		0s	36ms/step	
1/1		0s	33ms/step	
1/1		0s	40ms/step	
1/1		0s	32ms/step	
1/1		0s	51ms/step	
1/1		0s	40ms/step	
1/1		0s	34ms/step	
1/1		0s	37ms/step	
1/1		0s	36ms/step	
1/1		0s	33ms/step	
1/1		0s	35ms/step	
1/1		0s	34ms/step	
1/1		0s	33ms/step	
1/1		0s	33ms/step	
1/1		0s	41ms/step	
1/1		0s	41ms/step	- loss: 0.0027
1/1		0s	48ms/step	- loss: 0.0025
1/1		0s	33ms/step	
1/1		0s	40ms/step	
1/1		0s	29ms/step	
1/1		0s	32ms/step	

1/1	0s	31ms/step	
1/1	0s	34ms/step	
1/1	0s	31ms/step	
1/1	0s	45ms/step	
1/1	0s	32ms/step	
1/1	0s	26ms/step	
1/1	0s	32ms/step	
1/1	0s	44ms/step	
1/1	0s	32ms/step	
1/1	0s	34ms/step	
1/1	0s	40ms/step	
1/1	0s	49ms/step	
1/1	0s	37ms/step	
1/1	0s	36ms/step	
1/1	0s	39ms/step	
1/1	0s	32ms/step	
1/1	0s	38ms/step	loss: 0.0029
1/1	0s	45ms/step	loss: 0.0029
1/1	0s	52ms/step	
1/1	0s	35ms/step	
1/1	0s	47ms/step	
1/1	0s	47ms/step	
1/1	0s	36ms/step	
1/1	0s	42ms/step	
1/1	0s	36ms/step	
1/1	0s	30ms/step	
1/1	0s	36ms/step	
1/1	0s	43ms/step	
1/1	0s	37ms/step	
1/1	0s	28ms/step	
1/1	0s	32ms/step	
1/1	0s	26ms/step	
1/1	0s	44ms/step	
1/1	0s	32ms/step	
1/1	0s	30ms/step	
1/1	0s	35ms/step	
1/1	0s	32ms/step	
1/1	0s	31ms/step	
1/1	0s	38ms/step	loss: 0.0025
1/1	0s	36ms/step	loss: 0.0024
1/1	0s	37ms/step	
1/1	0s	48ms/step	
1/1	0s	44ms/step	
1/1	0s	59ms/step	
1/1	0s	40ms/step	
1/1	0s	39ms/step	
1/1	0s	36ms/step	
1/1	0s	34ms/step	
1/1	0s	40ms/step	
1/1	0s	41ms/step	
1/1	0s	39ms/step	
1/1	0s	38ms/step	
1/1	0s	32ms/step	
1/1	0s	38ms/step	
1/1	0s	43ms/step	
1/1	0s	42ms/step	


```
1/1 ————— 0s 39ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 49ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 41ms/step - loss: 0.0019
1/1 ————— 0s 39ms/step - loss: 0.0020
1/1 ————— 0s 31ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 45ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 46ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 44ms/step - loss: 0.0028
1/1 ————— 0s 34ms/step - loss: 0.0029
1/1 ————— 0s 32ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 57ms/step
1/1 ————— 0s 55ms/step
1/1 ————— 0s 43ms/step
1/1 ————— 0s 51ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 49ms/step - loss: 0.0026
1/1 ————— 0s 35ms/step - loss: 0.0025
Epoch: 127/149 | Loss: 0.0025 | Episodes: 512 | Win count: 5 | Win rate: 0.039 | time: 16.44 minutes
1/1 ————— 0s 34ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 31ms/step
```

1/1		0s	30ms/step	
1/1		0s	34ms/step	
1/1		0s	29ms/step	
1/1		0s	32ms/step	
1/1		0s	29ms/step	
1/1		0s	35ms/step	
1/1		0s	42ms/step	
1/1		0s	44ms/step	
1/1		0s	30ms/step	
1/1		0s	34ms/step	
1/1		0s	41ms/step	
1/1		0s	35ms/step	
1/1		0s	39ms/step	
1/1		0s	29ms/step	
1/1		0s	34ms/step	
1/1		0s	34ms/step	
1/1		0s	41ms/step	- loss: 0.0020
1/1		0s	37ms/step	- loss: 0.0020
1/1		0s	35ms/step	
1/1		0s	43ms/step	
1/1		0s	32ms/step	
1/1		0s	37ms/step	
1/1		0s	36ms/step	
1/1		0s	54ms/step	
1/1		0s	42ms/step	
1/1		0s	38ms/step	
1/1		0s	34ms/step	
1/1		0s	41ms/step	
1/1		0s	30ms/step	
1/1		0s	37ms/step	
1/1		0s	34ms/step	
1/1		0s	35ms/step	
1/1		0s	29ms/step	
1/1		0s	39ms/step	
1/1		0s	34ms/step	
1/1		0s	32ms/step	
1/1		0s	38ms/step	
1/1		0s	44ms/step	
1/1		0s	32ms/step	- loss: 0.0028
1/1		0s	35ms/step	- loss: 0.0027
1/1		0s	32ms/step	
1/1		0s	35ms/step	
1/1		0s	40ms/step	
1/1		0s	28ms/step	
1/1		0s	31ms/step	
1/1		0s	32ms/step	
1/1		0s	42ms/step	
1/1		0s	42ms/step	
1/1		0s	33ms/step	
1/1		0s	37ms/step	
1/1		0s	36ms/step	
1/1		0s	30ms/step	
1/1		0s	29ms/step	
1/1		0s	29ms/step	
1/1		0s	33ms/step	
1/1		0s	41ms/step	

```
1/1 ————— 0s 32ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 47ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 40ms/step - loss: 0.0021
1/1 ————— 0s 39ms/step - loss: 0.0020
1/1 ————— 0s 33ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 46ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 35ms/step - loss: 0.0032
1/1 ————— 0s 38ms/step - loss: 0.0031
1/1 ————— 0s 36ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 52ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 46ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 44ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 43ms/step
1/1 ————— 0s 42ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 37ms/step - loss: 0.0037
1/1 ————— 0s 37ms/step - loss: 0.0034
Epoch: 128/149 | Loss: 0.0034 | Episodes: 512 | Win count: 5 | Win rate: 0.039 | time: 16.58 minutes
1/1 ————— 0s 27ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 30ms/step
```

```
1/1 ————— 0s 32ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 48ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 43ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 34ms/step - loss: 0.0022
1/1 ————— 0s 48ms/step - loss: 0.0020
Epoch: 129/149 | Loss: 0.0020 | Episodes: 512 | Win count: 6 | Win rate: 0.046 | time: 16.61 minutes
1/1 ————— 0s 37ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 42ms/step
1/1 ————— 0s 42ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 56ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 45ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 35ms/step - loss: 0.0030
1/1 ————— 0s 42ms/step - loss: 0.0031
1/1 ————— 0s 28ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 54ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 44ms/step
1/1 ————— 0s 43ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 30ms/step
```

```
1/1 ————— 0s 37ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 48ms/step
1/1 ————— 0s 46ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 40ms/step - loss: 0.0030
1/1 ————— 0s 29ms/step - loss: 0.0030
1/1 ————— 0s 35ms/step
1/1 ————— 0s 47ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 45ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 46ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 47ms/step
1/1 ————— 0s 43ms/step - loss: 0.0024
1/1 ————— 0s 35ms/step - loss: 0.0024
1/1 ————— 0s 31ms/step
1/1 ————— 0s 51ms/step
1/1 ————— 0s 50ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 43ms/step
1/1 ————— 0s 48ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 45ms/step
1/1 ————— 0s 42ms/step - loss: 0.0023
1/1 ————— 0s 41ms/step - loss: 0.0022
Epoch: 130/149 | Loss: 0.0022 | Episodes: 512 | Win count: 6 | Win rate: 0.046 | time: 16.72 minutes
1/1 ————— 0s 31ms/step
1/1 ————— 0s 42ms/step
```

1/1	<div></div>	0s	35ms/step	
1/1	<div></div>	0s	34ms/step	
1/1	<div></div>	0s	33ms/step	
1/1	<div></div>	0s	35ms/step	
1/1	<div></div>	0s	36ms/step	
1/1	<div></div>	0s	37ms/step	
1/1	<div></div>	0s	43ms/step	
1/1	<div></div>	0s	58ms/step	
1/1	<div></div>	0s	34ms/step	
1/1	<div></div>	0s	33ms/step	
1/1	<div></div>	0s	38ms/step	
1/1	<div></div>	0s	35ms/step	
1/1	<div></div>	0s	33ms/step	
1/1	<div></div>	0s	32ms/step	
1/1	<div></div>	0s	36ms/step	
1/1	<div></div>	0s	41ms/step	
1/1	<div></div>	0s	43ms/step	
1/1	<div></div>	0s	50ms/step	
1/1	<div></div>	0s	43ms/step	- loss: 0.0031
1/1	<div></div>	0s	41ms/step	- loss: 0.0031
1/1	<div></div>	0s	43ms/step	
1/1	<div></div>	0s	60ms/step	
1/1	<div></div>	0s	32ms/step	
1/1	<div></div>	0s	47ms/step	
1/1	<div></div>	0s	37ms/step	
1/1	<div></div>	0s	35ms/step	
1/1	<div></div>	0s	39ms/step	
1/1	<div></div>	0s	50ms/step	
1/1	<div></div>	0s	44ms/step	
1/1	<div></div>	0s	41ms/step	
1/1	<div></div>	0s	40ms/step	
1/1	<div></div>	0s	39ms/step	
1/1	<div></div>	0s	37ms/step	
1/1	<div></div>	0s	41ms/step	
1/1	<div></div>	0s	41ms/step	
1/1	<div></div>	0s	40ms/step	
1/1	<div></div>	0s	42ms/step	
1/1	<div></div>	0s	33ms/step	
1/1	<div></div>	0s	39ms/step	
1/1	<div></div>	0s	36ms/step	
1/1	<div></div>	0s	44ms/step	- loss: 0.0027
1/1	<div></div>	0s	50ms/step	- loss: 0.0027
1/1	<div></div>	0s	38ms/step	
1/1	<div></div>	0s	40ms/step	
1/1	<div></div>	0s	54ms/step	
1/1	<div></div>	0s	44ms/step	
1/1	<div></div>	0s	56ms/step	
1/1	<div></div>	0s	46ms/step	
1/1	<div></div>	0s	46ms/step	
1/1	<div></div>	0s	47ms/step	
1/1	<div></div>	0s	58ms/step	
1/1	<div></div>	0s	38ms/step	
1/1	<div></div>	0s	26ms/step	
1/1	<div></div>	0s	40ms/step	
1/1	<div></div>	0s	30ms/step	
1/1	<div></div>	0s	32ms/step	

```
1/1 ————— 0s 31ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 40ms/step - loss: 0.0028
1/1 ————— 0s 34ms/step - loss: 0.0028
1/1 ————— 0s 32ms/step
1/1 ————— 0s 45ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 45ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 48ms/step
1/1 ————— 0s 46ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 48ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 47ms/step
1/1 ————— 0s 65ms/step
1/1 ————— 0s 41ms/step - loss: 0.0022
1/1 ————— 0s 36ms/step - loss: 0.0021
Epoch: 131/149 | Loss: 0.0021 | Episodes: 512 | Win count: 6 | Win rate: 0.045 | time: 16.83 minutes
1/1 ————— 0s 36ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 59ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 55ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 40ms/step - loss: 0.0027
1/1 ————— 0s 35ms/step - loss: 0.0026
1/1 ————— 0s 33ms/step
1/1 ————— 0s 29ms/step
```

1/1	0s	32ms/step	
1/1	0s	43ms/step	
1/1	0s	37ms/step	
1/1	0s	39ms/step	
1/1	0s	49ms/step	
1/1	0s	36ms/step	
1/1	0s	33ms/step	
1/1	0s	37ms/step	
1/1	0s	35ms/step	
1/1	0s	32ms/step	
1/1	0s	36ms/step	
1/1	0s	45ms/step	
1/1	0s	31ms/step	
1/1	0s	37ms/step	
1/1	0s	33ms/step	
1/1	0s	35ms/step	
1/1	0s	34ms/step	
1/1	0s	37ms/step	
1/1	0s	42ms/step	- loss: 0.0021
1/1	0s	43ms/step	- loss: 0.0020
1/1	0s	47ms/step	
1/1	0s	51ms/step	
1/1	0s	34ms/step	
1/1	0s	31ms/step	
1/1	0s	37ms/step	
1/1	0s	37ms/step	
1/1	0s	39ms/step	
1/1	0s	35ms/step	
1/1	0s	32ms/step	
1/1	0s	34ms/step	
1/1	0s	38ms/step	
1/1	0s	33ms/step	
1/1	0s	36ms/step	
1/1	0s	37ms/step	
1/1	0s	29ms/step	
1/1	0s	45ms/step	
1/1	0s	40ms/step	
1/1	0s	37ms/step	
1/1	0s	35ms/step	
1/1	0s	42ms/step	
1/1	0s	39ms/step	- loss: 0.0034
1/1	0s	35ms/step	- loss: 0.0033
1/1	0s	33ms/step	
1/1	0s	41ms/step	
1/1	0s	33ms/step	
1/1	0s	47ms/step	
1/1	0s	41ms/step	
1/1	0s	41ms/step	
1/1	0s	30ms/step	
1/1	0s	49ms/step	
1/1	0s	32ms/step	
1/1	0s	36ms/step	
1/1	0s	37ms/step	
1/1	0s	47ms/step	
1/1	0s	34ms/step	
1/1	0s	61ms/step	


```
1/1 ██████████ 0s 50ms/step
1/1 ██████████ 0s 51ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 35ms/step - loss: 0.0016
1/1 ██████████ 0s 38ms/step - loss: 0.0017
Epoch: 132/149 | Loss: 0.0017 | Episodes: 512 | Win count: 6 | Win rate: 0.045 | time: 16.95 minutes
1/1 ██████████ 0s 42ms/step
1/1 ██████████ 0s 54ms/step
1/1 ██████████ 0s 48ms/step
1/1 ██████████ 0s 42ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 41ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 40ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 40ms/step
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 43ms/step - loss: 0.0017
1/1 ██████████ 0s 52ms/step - loss: 0.0016
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 43ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 42ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 40ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 62ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 41ms/step
1/1 ██████████ 0s 42ms/step
1/1 ██████████ 0s 51ms/step - loss: 0.0024
1/1 ██████████ 0s 37ms/step - loss: 0.0024
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 36ms/step
```

1/1	=====	0s	50ms/step	
1/1	=====	0s	39ms/step	
1/1	=====	0s	35ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	36ms/step	
1/1	=====	0s	40ms/step	
1/1	=====	0s	36ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	39ms/step	
1/1	=====	0s	35ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	49ms/step	
1/1	=====	0s	28ms/step	
1/1	=====	0s	46ms/step	
1/1	=====	0s	35ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	46ms/step	
1/1	=====	0s	29ms/step	
1/1	=====	0s	39ms/step	- loss: 0.0023
1/1	=====	0s	35ms/step	- loss: 0.0022
1/1	=====	0s	31ms/step	
1/1	=====	0s	46ms/step	
1/1	=====	0s	38ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	36ms/step	
1/1	=====	0s	35ms/step	
1/1	=====	0s	37ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	39ms/step	
1/1	=====	0s	36ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	40ms/step	
1/1	=====	0s	50ms/step	
1/1	=====	0s	42ms/step	
1/1	=====	0s	36ms/step	
1/1	=====	0s	49ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	42ms/step	- loss: 0.0029
1/1	=====	0s	37ms/step	- loss: 0.0030
1/1	=====	0s	33ms/step	
1/1	=====	0s	42ms/step	
1/1	=====	0s	30ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	29ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	40ms/step	
1/1	=====	0s	36ms/step	
1/1	=====	0s	50ms/step	
1/1	=====	0s	37ms/step	
1/1	=====	0s	40ms/step	
1/1	=====	0s	45ms/step	
1/1	=====	0s	43ms/step	
1/1	=====	0s	40ms/step	

1/1	0s	30ms/step	
1/1	0s	36ms/step	
1/1	0s	27ms/step	
1/1	0s	38ms/step	
1/1	0s	48ms/step	
1/1	0s	33ms/step	
1/1	0s	34ms/step	- loss: 0.0031
1/1	0s	51ms/step	- loss: 0.0030
1/1	0s	32ms/step	
1/1	0s	35ms/step	
1/1	0s	37ms/step	
1/1	0s	34ms/step	
1/1	0s	42ms/step	
1/1	0s	41ms/step	
1/1	0s	31ms/step	
1/1	0s	38ms/step	
1/1	0s	34ms/step	
1/1	0s	34ms/step	
1/1	0s	45ms/step	
1/1	0s	60ms/step	
1/1	0s	48ms/step	
1/1	0s	45ms/step	
1/1	0s	43ms/step	
1/1	0s	43ms/step	
1/1	0s	50ms/step	
1/1	0s	43ms/step	
1/1	0s	44ms/step	
1/1	0s	42ms/step	
1/1	0s	39ms/step	- loss: 0.0332
1/1	0s	33ms/step	- loss: 0.0325
1/1	0s	49ms/step	
1/1	0s	30ms/step	
1/1	0s	37ms/step	
1/1	0s	31ms/step	
1/1	0s	50ms/step	
1/1	0s	36ms/step	
1/1	0s	37ms/step	
1/1	0s	32ms/step	
1/1	0s	30ms/step	
1/1	0s	31ms/step	
1/1	0s	28ms/step	
1/1	0s	49ms/step	
1/1	0s	33ms/step	
1/1	0s	39ms/step	
1/1	0s	35ms/step	
1/1	0s	45ms/step	
1/1	0s	29ms/step	
1/1	0s	31ms/step	
1/1	0s	44ms/step	
1/1	0s	39ms/step	
1/1	0s	45ms/step	- loss: 0.0018
1/1	0s	46ms/step	- loss: 0.0019
1/1	0s	39ms/step	
1/1	0s	49ms/step	
1/1	0s	32ms/step	
1/1	0s	34ms/step	

```
1/1 28ms/step
1/1 30ms/step
1/1 40ms/step
1/1 50ms/step
1/1 35ms/step
1/1 33ms/step
1/1 35ms/step
1/1 39ms/step
1/1 33ms/step
1/1 41ms/step
1/1 31ms/step
1/1 51ms/step
1/1 31ms/step
1/1 31ms/step
1/1 37ms/step
1/1 39ms/step
1/1 39ms/step - loss: 0.0021
1/1 45ms/step - loss: 0.0022
Epoch: 133/149 | Loss: 0.0022 | Episodes: 512 | Win count: 6 | Win rate: 0.045 | time: 17.18 minutes
1/1 35ms/step
1/1 30ms/step
1/1 38ms/step
1/1 39ms/step
1/1 30ms/step
1/1 31ms/step
1/1 42ms/step
1/1 42ms/step
1/1 33ms/step
1/1 37ms/step
1/1 49ms/step
1/1 40ms/step
1/1 42ms/step
1/1 40ms/step
1/1 50ms/step
1/1 44ms/step
1/1 52ms/step
1/1 43ms/step
1/1 42ms/step
1/1 33ms/step
1/1 52ms/step - loss: 0.0017
1/1 50ms/step - loss: 0.0017
1/1 40ms/step
1/1 40ms/step
1/1 37ms/step
1/1 43ms/step
1/1 38ms/step
1/1 37ms/step
1/1 59ms/step
1/1 47ms/step
1/1 39ms/step
1/1 46ms/step
1/1 38ms/step
1/1 52ms/step
1/1 56ms/step
1/1 48ms/step
```

```
1/1 ██████████ 0s 49ms/step
1/1 ██████████ 0s 45ms/step
1/1 ██████████ 0s 45ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 61ms/step - loss: 0.0019
1/1 ██████████ 0s 51ms/step - loss: 0.0019
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 45ms/step
1/1 ██████████ 0s 44ms/step
1/1 ██████████ 0s 59ms/step
1/1 ██████████ 0s 43ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 40ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 53ms/step
1/1 ██████████ 0s 45ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 54ms/step - loss: 0.0022
1/1 ██████████ 0s 40ms/step - loss: 0.0021
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 46ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 57ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 45ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 38ms/step - loss: 0.0288
1/1 ██████████ 0s 34ms/step - loss: 0.0278
1/1 ██████████ 0s 46ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 30ms/step
```

1/1	0s	30ms/step	
1/1	0s	30ms/step	
1/1	0s	32ms/step	
1/1	0s	30ms/step	
1/1	0s	29ms/step	
1/1	0s	49ms/step	
1/1	0s	32ms/step	
1/1	0s	33ms/step	
1/1	0s	35ms/step	
1/1	0s	36ms/step	
1/1	0s	33ms/step	
1/1	0s	47ms/step	
1/1	0s	50ms/step	
1/1	0s	38ms/step	
1/1	0s	42ms/step	
1/1	0s	37ms/step	
1/1	0s	44ms/step	- loss: 0.0034
1/1	0s	41ms/step	- loss: 0.0034
1/1	0s	33ms/step	
1/1	0s	40ms/step	
1/1	0s	64ms/step	
1/1	0s	33ms/step	
1/1	0s	47ms/step	
1/1	0s	34ms/step	
1/1	0s	30ms/step	
1/1	0s	31ms/step	
1/1	0s	29ms/step	
1/1	0s	30ms/step	
1/1	0s	42ms/step	
1/1	0s	45ms/step	
1/1	0s	43ms/step	
1/1	0s	40ms/step	
1/1	0s	34ms/step	
1/1	0s	41ms/step	
1/1	0s	44ms/step	
1/1	0s	42ms/step	
1/1	0s	40ms/step	
1/1	0s	40ms/step	
1/1	0s	55ms/step	- loss: 0.0032
1/1	0s	36ms/step	- loss: 0.0034
1/1	0s	41ms/step	
1/1	0s	43ms/step	
1/1	0s	34ms/step	
1/1	0s	40ms/step	
1/1	0s	37ms/step	
1/1	0s	49ms/step	
1/1	0s	36ms/step	
1/1	0s	37ms/step	
1/1	0s	39ms/step	
1/1	0s	40ms/step	
1/1	0s	38ms/step	
1/1	0s	30ms/step	
1/1	0s	39ms/step	
1/1	0s	30ms/step	
1/1	0s	37ms/step	
1/1	0s	36ms/step	

```
1/1 ————— 0s 33ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 42ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 39ms/step - loss: 0.0018
1/1 ————— 0s 41ms/step - loss: 0.0017
1/1 ————— 0s 35ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 42ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 49ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 45ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 47ms/step
1/1 ————— 0s 45ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 40ms/step - loss: 0.0015
1/1 ————— 0s 65ms/step - loss: 0.0016
Epoch: 134/149 | Loss: 0.0016 | Episodes: 512 | Win count: 6 | Win rate: 0.044 | time: 17.41 minutes
1/1 ————— 0s 38ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 43ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 44ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 50ms/step
1/1 ————— 0s 45ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 52ms/step
1/1 ————— 0s 44ms/step - loss: 0.0039
1/1 ————— 0s 37ms/step - loss: 0.0038
1/1 ————— 0s 37ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 35ms/step
```

1/1		0s	34ms/step	
1/1		0s	30ms/step	
1/1		0s	36ms/step	
1/1		0s	34ms/step	
1/1		0s	28ms/step	
1/1		0s	34ms/step	
1/1		0s	32ms/step	
1/1		0s	37ms/step	
1/1		0s	37ms/step	
1/1		0s	48ms/step	
1/1		0s	48ms/step	
1/1		0s	41ms/step	
1/1		0s	36ms/step	
1/1		0s	41ms/step	
1/1		0s	34ms/step	
1/1		0s	40ms/step	
1/1		0s	44ms/step	- loss: 0.0027
1/1		0s	48ms/step	- loss: 0.0027
1/1		0s	37ms/step	
1/1		0s	52ms/step	
1/1		0s	55ms/step	
1/1		0s	43ms/step	
1/1		0s	48ms/step	
1/1		0s	33ms/step	
1/1		0s	36ms/step	
1/1		0s	30ms/step	
1/1		0s	29ms/step	
1/1		0s	30ms/step	
1/1		0s	43ms/step	
1/1		0s	35ms/step	
1/1		0s	34ms/step	
1/1		0s	31ms/step	
1/1		0s	37ms/step	
1/1		0s	38ms/step	
1/1		0s	33ms/step	
1/1		0s	34ms/step	
1/1		0s	42ms/step	
1/1		0s	34ms/step	
1/1		0s	41ms/step	- loss: 0.0030
1/1		0s	45ms/step	- loss: 0.0029
1/1		0s	27ms/step	
1/1		0s	27ms/step	
1/1		0s	45ms/step	
1/1		0s	31ms/step	
1/1		0s	37ms/step	
1/1		0s	35ms/step	
1/1		0s	32ms/step	
1/1		0s	26ms/step	
1/1		0s	40ms/step	
1/1		0s	32ms/step	
1/1		0s	36ms/step	
1/1		0s	35ms/step	
1/1		0s	34ms/step	
1/1		0s	33ms/step	
1/1		0s	42ms/step	
1/1		0s	38ms/step	


```
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 27ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 36ms/step - loss: 0.0028
1/1 ██████████ 0s 41ms/step - loss: 0.0027
Epoch: 135/149 | Loss: 0.0027 | Episodes: 512 | Win count: 6 | Win rate: 0.044 | time: 17.53 minutes
1/1 ██████████ 0s 47ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 40ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 44ms/step
1/1 ██████████ 0s 43ms/step
1/1 ██████████ 0s 45ms/step
1/1 ██████████ 0s 46ms/step
1/1 ██████████ 0s 56ms/step
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 42ms/step
1/1 ██████████ 0s 41ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 41ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 40ms/step - loss: 0.0024
1/1 ██████████ 0s 33ms/step - loss: 0.0023
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 40ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 42ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 48ms/step
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 47ms/step
1/1 ██████████ 0s 56ms/step - loss: 0.0019
1/1 ██████████ 0s 49ms/step - loss: 0.0019
1/1 ██████████ 0s 44ms/step
1/1 ██████████ 0s 44ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 32ms/step
```

1/1	0s	29ms/step	
1/1	0s	41ms/step	
1/1	0s	31ms/step	
1/1	0s	39ms/step	
1/1	0s	35ms/step	
1/1	0s	31ms/step	
1/1	0s	33ms/step	
1/1	0s	40ms/step	
1/1	0s	43ms/step	
1/1	0s	76ms/step	
1/1	0s	45ms/step	
1/1	0s	42ms/step	
1/1	0s	38ms/step	
1/1	0s	40ms/step	
1/1	0s	45ms/step	
1/1	0s	42ms/step	
1/1	0s	43ms/step	- loss: 0.0032
1/1	0s	65ms/step	- loss: 0.0029
1/1	0s	39ms/step	
1/1	0s	37ms/step	
1/1	0s	38ms/step	
1/1	0s	38ms/step	
1/1	0s	45ms/step	
1/1	0s	42ms/step	
1/1	0s	37ms/step	
1/1	0s	31ms/step	
1/1	0s	36ms/step	
1/1	0s	30ms/step	
1/1	0s	31ms/step	
1/1	0s	29ms/step	
1/1	0s	39ms/step	
1/1	0s	30ms/step	
1/1	0s	37ms/step	
1/1	0s	38ms/step	
1/1	0s	40ms/step	
1/1	0s	35ms/step	
1/1	0s	33ms/step	
1/1	0s	28ms/step	
1/1	0s	54ms/step	- loss: 0.0018
1/1	0s	42ms/step	- loss: 0.0018
1/1	0s	32ms/step	
1/1	0s	39ms/step	
1/1	0s	35ms/step	
1/1	0s	33ms/step	
1/1	0s	44ms/step	
1/1	0s	64ms/step	
1/1	0s	37ms/step	
1/1	0s	45ms/step	
1/1	0s	46ms/step	
1/1	0s	44ms/step	
1/1	0s	43ms/step	
1/1	0s	36ms/step	
1/1	0s	39ms/step	
1/1	0s	31ms/step	
1/1	0s	29ms/step	
1/1	0s	32ms/step	

1/1	0s	37ms/step	
1/1	0s	36ms/step	
1/1	0s	55ms/step	
1/1	0s	36ms/step	
1/1	0s	47ms/step	- loss: 0.0022
1/1	0s	39ms/step	- loss: 0.0022
1/1	0s	36ms/step	
1/1	0s	46ms/step	
1/1	0s	36ms/step	
1/1	0s	41ms/step	
1/1	0s	46ms/step	
1/1	0s	34ms/step	
1/1	0s	37ms/step	
1/1	0s	32ms/step	
1/1	0s	38ms/step	
1/1	0s	36ms/step	
1/1	0s	34ms/step	
1/1	0s	48ms/step	
1/1	0s	35ms/step	
1/1	0s	42ms/step	
1/1	0s	35ms/step	
1/1	0s	43ms/step	
1/1	0s	35ms/step	
1/1	0s	28ms/step	
1/1	0s	36ms/step	
1/1	0s	40ms/step	
1/1	0s	40ms/step	- loss: 0.0036
1/1	0s	41ms/step	- loss: 0.0036
1/1	0s	37ms/step	
1/1	0s	30ms/step	
1/1	0s	32ms/step	
1/1	0s	37ms/step	
1/1	0s	39ms/step	
1/1	0s	30ms/step	
1/1	0s	32ms/step	
1/1	0s	35ms/step	
1/1	0s	40ms/step	
1/1	0s	40ms/step	
1/1	0s	39ms/step	
1/1	0s	35ms/step	
1/1	0s	40ms/step	
1/1	0s	46ms/step	
1/1	0s	52ms/step	
1/1	0s	42ms/step	
1/1	0s	35ms/step	
1/1	0s	36ms/step	
1/1	0s	32ms/step	
1/1	0s	39ms/step	
1/1	0s	47ms/step	- loss: 0.0018
1/1	0s	49ms/step	- loss: 0.0018
1/1	0s	44ms/step	
1/1	0s	63ms/step	
1/1	0s	40ms/step	
1/1	0s	40ms/step	
1/1	0s	35ms/step	
1/1	0s	35ms/step	

```
1/1 46ms/step
1/1 43ms/step
1/1 37ms/step
1/1 44ms/step
1/1 32ms/step
1/1 36ms/step
1/1 36ms/step
1/1 38ms/step
1/1 38ms/step
1/1 36ms/step
1/1 31ms/step
1/1 36ms/step
1/1 44ms/step
1/1 30ms/step
1/1 41ms/step - loss: 0.0016
1/1 46ms/step - loss: 0.0017
Epoch: 136/149 | Loss: 0.0017 | Episodes: 512 | Win count: 6 | Win rate: 0.044 | time: 17.77 minutes
1/1 44ms/step
1/1 36ms/step
1/1 30ms/step
1/1 34ms/step
1/1 36ms/step
1/1 39ms/step
1/1 35ms/step
1/1 34ms/step
1/1 29ms/step
1/1 34ms/step
1/1 34ms/step
1/1 36ms/step
1/1 40ms/step
1/1 39ms/step
1/1 44ms/step
1/1 38ms/step
1/1 31ms/step
1/1 34ms/step
1/1 45ms/step
1/1 41ms/step
1/1 53ms/step - loss: 0.0025
1/1 42ms/step - loss: 0.0024
1/1 42ms/step
1/1 36ms/step
1/1 41ms/step
1/1 37ms/step
1/1 40ms/step
1/1 39ms/step
1/1 56ms/step
1/1 44ms/step
1/1 50ms/step
1/1 30ms/step
1/1 34ms/step
1/1 33ms/step
1/1 36ms/step
1/1 35ms/step
1/1 32ms/step
1/1 31ms/step
```

```
1/1 ————— 0s 32ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 35ms/step - loss: 0.0029
1/1 ————— 0s 38ms/step - loss: 0.0027
1/1 ————— 0s 45ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 53ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 44ms/step - loss: 0.0031
1/1 ————— 0s 47ms/step - loss: 0.0030
1/1 ————— 0s 37ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 53ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 42ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 51ms/step - loss: 0.0015
1/1 ————— 0s 35ms/step - loss: 0.0014
Epoch: 137/149 | Loss: 0.0014 | Episodes: 512 | Win count: 6 | Win rate: 0.043 | time: 17.88 minutes
1/1 ————— 0s 35ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 35ms/step
```

1/1		0s	34ms/step	
1/1		0s	41ms/step	
1/1		0s	33ms/step	
1/1		0s	34ms/step	
1/1		0s	42ms/step	
1/1		0s	40ms/step	
1/1		0s	33ms/step	
1/1		0s	34ms/step	
1/1		0s	34ms/step	
1/1		0s	37ms/step	
1/1		0s	34ms/step	
1/1		0s	44ms/step	
1/1		0s	25ms/step	
1/1		0s	34ms/step	
1/1		0s	34ms/step	
1/1		0s	48ms/step	
1/1		0s	50ms/step	- loss: 0.0022
1/1		0s	42ms/step	- loss: 0.0022
1/1		0s	39ms/step	
1/1		0s	40ms/step	
1/1		0s	39ms/step	
1/1		0s	30ms/step	
1/1		0s	36ms/step	
1/1		0s	38ms/step	
1/1		0s	49ms/step	
1/1		0s	54ms/step	
1/1		0s	43ms/step	
1/1		0s	53ms/step	
1/1		0s	67ms/step	
1/1		0s	36ms/step	
1/1		0s	46ms/step	
1/1		0s	41ms/step	
1/1		0s	35ms/step	
1/1		0s	34ms/step	
1/1		0s	45ms/step	
1/1		0s	33ms/step	
1/1		0s	31ms/step	
1/1		0s	36ms/step	
1/1		0s	43ms/step	- loss: 0.0035
1/1		0s	54ms/step	- loss: 0.0034
1/1		0s	39ms/step	
1/1		0s	31ms/step	
1/1		0s	29ms/step	
1/1		0s	36ms/step	
1/1		0s	28ms/step	
1/1		0s	48ms/step	
1/1		0s	40ms/step	
1/1		0s	32ms/step	
1/1		0s	31ms/step	
1/1		0s	31ms/step	
1/1		0s	36ms/step	
1/1		0s	33ms/step	
1/1		0s	31ms/step	
1/1		0s	34ms/step	
1/1		0s	43ms/step	
1/1		0s	40ms/step	

1/1	=====	0s	40ms/step	
1/1	=====	0s	38ms/step	
1/1	=====	0s	37ms/step	
1/1	=====	0s	45ms/step	
1/1	=====	0s	41ms/step	- loss: 0.0025
1/1	=====	0s	49ms/step	- loss: 0.0025
1/1	=====	0s	38ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	47ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	37ms/step	
1/1	=====	0s	30ms/step	
1/1	=====	0s	40ms/step	
1/1	=====	0s	40ms/step	
1/1	=====	0s	39ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	42ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	28ms/step	
1/1	=====	0s	35ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	44ms/step	
1/1	=====	0s	37ms/step	
1/1	=====	0s	36ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	30ms/step	
1/1	=====	0s	45ms/step	- loss: 0.0026
1/1	=====	0s	39ms/step	- loss: 0.0026
1/1	=====	0s	50ms/step	
1/1	=====	0s	36ms/step	
1/1	=====	0s	41ms/step	
1/1	=====	0s	37ms/step	
1/1	=====	0s	28ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	26ms/step	
1/1	=====	0s	36ms/step	
1/1	=====	0s	41ms/step	
1/1	=====	0s	37ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	49ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	38ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	30ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	38ms/step	
1/1	=====	0s	47ms/step	- loss: 0.0027
1/1	=====	0s	44ms/step	- loss: 0.0025
1/1	=====	0s	45ms/step	
1/1	=====	0s	53ms/step	
1/1	=====	0s	43ms/step	
1/1	=====	0s	46ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	53ms/step	

```
1/1 ██████████ 0s 46ms/step
1/1 ██████████ 0s 48ms/step
1/1 ██████████ 0s 43ms/step
1/1 ██████████ 0s 43ms/step
1/1 ██████████ 0s 45ms/step
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 41ms/step
1/1 ██████████ 0s 44ms/step
1/1 ██████████ 0s 46ms/step
1/1 ██████████ 0s 40ms/step
1/1 ██████████ 0s 42ms/step
1/1 ██████████ 0s 40ms/step - loss: 0.0023
1/1 ██████████ 0s 33ms/step - loss: 0.0024
Epoch: 138/149 | Loss: 0.0024 | Episodes: 512 | Win count: 6 | Win rate: 0.043 | time: 18.06 minutes
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 42ms/step
1/1 ██████████ 0s 47ms/step
1/1 ██████████ 0s 44ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 44ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 45ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 42ms/step
1/1 ██████████ 0s 52ms/step
1/1 ██████████ 0s 44ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 40ms/step - loss: 0.0046
1/1 ██████████ 0s 42ms/step - loss: 0.0042
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 42ms/step
1/1 ██████████ 0s 40ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 45ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 41ms/step
1/1 ██████████ 0s 35ms/step
```



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1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 46ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 38ms/step - loss: 0.0027
1/1 ██████████ 0s 31ms/step - loss: 0.0027
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 44ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 44ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 43ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 38ms/step - loss: 0.0028
1/1 ██████████ 0s 42ms/step - loss: 0.0027
1/1 ██████████ 0s 43ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 45ms/step
1/1 ██████████ 0s 47ms/step
1/1 ██████████ 0s 51ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 46ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 52ms/step - loss: 0.0020
1/1 ██████████ 0s 48ms/step - loss: 0.0020
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 46ms/step
1/1 ██████████ 0s 54ms/step
1/1 ██████████ 0s 41ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 32ms/step
    
```

```
1/1 ————— 0s 34ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 45ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 40ms/step - loss: 0.0034
1/1 ————— 0s 46ms/step - loss: 0.0031
1/1 ————— 0s 33ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 42ms/step
1/1 ————— 0s 51ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 43ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 39ms/step - loss: 0.0029
1/1 ————— 0s 40ms/step - loss: 0.0027
Epoch: 139/149 | Loss: 0.0027 | Episodes: 512 | Win count: 6 | Win rate: 0.043 | tim
e: 18.23 minutes
1/1 ————— 0s 36ms/step
1/1 ————— 0s 54ms/step
1/1 ————— 0s 44ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 44ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 44ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 38ms/step
```

1/1	=====	0s	51ms/step	
1/1	=====	0s	47ms/step	
1/1	=====	0s	36ms/step	
1/1	=====	0s	28ms/step	
1/1	=====	0s	37ms/step	- loss: 0.0024
1/1	=====	0s	42ms/step	- loss: 0.0025
1/1	=====	0s	34ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	45ms/step	
1/1	=====	0s	28ms/step	
1/1	=====	0s	37ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	47ms/step	
1/1	=====	0s	43ms/step	
1/1	=====	0s	44ms/step	
1/1	=====	0s	35ms/step	
1/1	=====	0s	35ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	39ms/step	
1/1	=====	0s	36ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	43ms/step	
1/1	=====	0s	46ms/step	- loss: 0.0024
1/1	=====	0s	44ms/step	- loss: 0.0025
1/1	=====	0s	33ms/step	
1/1	=====	0s	36ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	38ms/step	
1/1	=====	0s	54ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	35ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	44ms/step	
1/1	=====	0s	36ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	45ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	35ms/step	
1/1	=====	0s	37ms/step	
1/1	=====	0s	35ms/step	
1/1	=====	0s	51ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	47ms/step	- loss: 0.0034
1/1	=====	0s	38ms/step	- loss: 0.0034
1/1	=====	0s	43ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	28ms/step	
1/1	=====	0s	38ms/step	
1/1	=====	0s	41ms/step	

1/1		0s	30ms/step	
1/1		0s	37ms/step	
1/1		0s	32ms/step	
1/1		0s	34ms/step	
1/1		0s	31ms/step	
1/1		0s	34ms/step	
1/1		0s	43ms/step	
1/1		0s	30ms/step	
1/1		0s	43ms/step	
1/1		0s	33ms/step	
1/1		0s	34ms/step	
1/1		0s	38ms/step	
1/1		0s	43ms/step	
1/1		0s	35ms/step	
1/1		0s	56ms/step	- loss: 0.0021
1/1		0s	34ms/step	- loss: 0.0021
1/1		0s	35ms/step	
1/1		0s	38ms/step	
1/1		0s	34ms/step	
1/1		0s	32ms/step	
1/1		0s	40ms/step	
1/1		0s	33ms/step	
1/1		0s	30ms/step	
1/1		0s	36ms/step	
1/1		0s	48ms/step	
1/1		0s	41ms/step	
1/1		0s	35ms/step	
1/1		0s	51ms/step	
1/1		0s	32ms/step	
1/1		0s	45ms/step	
1/1		0s	42ms/step	
1/1		0s	36ms/step	
1/1		0s	37ms/step	
1/1		0s	39ms/step	
1/1		0s	32ms/step	
1/1		0s	35ms/step	
1/1		0s	50ms/step	- loss: 0.0022
1/1		0s	52ms/step	- loss: 0.0021
1/1		0s	32ms/step	
1/1		0s	37ms/step	
1/1		0s	43ms/step	
1/1		0s	32ms/step	
1/1		0s	36ms/step	
1/1		0s	30ms/step	
1/1		0s	38ms/step	
1/1		0s	41ms/step	
1/1		0s	34ms/step	
1/1		0s	30ms/step	
1/1		0s	32ms/step	
1/1		0s	36ms/step	
1/1		0s	27ms/step	
1/1		0s	30ms/step	
1/1		0s	32ms/step	
1/1		0s	49ms/step	
1/1		0s	34ms/step	
1/1		0s	39ms/step	

```
1/1 ██████████ 0s 45ms/step
1/1 ██████████ 0s 46ms/step
1/1 ██████████ 0s 37ms/step - loss: 0.0023
1/1 ██████████ 0s 37ms/step - loss: 0.0023
Epoch: 140/149 | Loss: 0.0023 | Episodes: 512 | Win count: 6 | Win rate: 0.043 | time: 18.40 minutes
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 45ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 49ms/step
1/1 ██████████ 0s 40ms/step
1/1 ██████████ 0s 46ms/step
1/1 ██████████ 0s 50ms/step
1/1 ██████████ 0s 54ms/step
1/1 ██████████ 0s 42ms/step
1/1 ██████████ 0s 57ms/step
1/1 ██████████ 0s 46ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 49ms/step
1/1 ██████████ 0s 52ms/step
1/1 ██████████ 0s 47ms/step
1/1 ██████████ 0s 45ms/step
1/1 ██████████ 0s 63ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 42ms/step - loss: 0.0030
1/1 ██████████ 0s 49ms/step - loss: 0.0030
1/1 ██████████ 0s 46ms/step
1/1 ██████████ 0s 40ms/step
1/1 ██████████ 0s 44ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 44ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 49ms/step
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 39ms/step - loss: 0.0030
1/1 ██████████ 0s 34ms/step - loss: 0.0028
1/1 ██████████ 0s 40ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 43ms/step
1/1 ██████████ 0s 29ms/step
```

```
1/1 ————— 0s 34ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 42ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 42ms/step
1/1 ————— 0s 51ms/step
1/1 ————— 0s 56ms/step
1/1 ————— 0s 43ms/step
1/1 ————— 0s 48ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 42ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 45ms/step - loss: 0.0037
1/1 ————— 0s 46ms/step - loss: 0.0036
1/1 ————— 0s 35ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 59ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 53ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 44ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 46ms/step
1/1 ————— 0s 46ms/step - loss: 0.0033
1/1 ————— 0s 41ms/step - loss: 0.0030
Epoch: 141/149 | Loss: 0.0030 | Episodes: 512 | Win count: 6 | Win rate: 0.042 | tim
e: 18.52 minutes
1/1 ————— 0s 36ms/step
1/1 ————— 0s 63ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 46ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 34ms/step
```

```
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 38ms/step - loss: 0.0293
1/1 ██████████ 0s 40ms/step - loss: 0.0289
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 52ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 45ms/step
1/1 ██████████ 0s 45ms/step
1/1 ██████████ 0s 40ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 43ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 42ms/step - loss: 0.0020
1/1 ██████████ 0s 40ms/step - loss: 0.0020
1/1 ██████████ 0s 45ms/step
1/1 ██████████ 0s 44ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 41ms/step
1/1 ██████████ 0s 42ms/step
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 47ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 45ms/step
1/1 ██████████ 0s 43ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 50ms/step - loss: 0.0023
1/1 ██████████ 0s 35ms/step - loss: 0.0022
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 41ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 35ms/step
```

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1/1 ██████████ 0s 49ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 49ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 47ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 41ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 36ms/step - loss: 0.0017
1/1 ██████████ 0s 41ms/step - loss: 0.0017
Epoch: 142/149 | Loss: 0.0017 | Episodes: 512 | Win count: 6 | Win rate: 0.042 | time: 18.63 minutes
1/1 ██████████ 0s 49ms/step
1/1 ██████████ 0s 41ms/step
1/1 ██████████ 0s 48ms/step
1/1 ██████████ 0s 43ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 42ms/step
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 49ms/step
1/1 ██████████ 0s 42ms/step
1/1 ██████████ 0s 46ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 45ms/step
1/1 ██████████ 0s 34ms/step - loss: 0.0023
1/1 ██████████ 0s 35ms/step - loss: 0.0023
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 27ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 40ms/step
1/1 ██████████ 0s 44ms/step
1/1 ██████████ 0s 40ms/step
1/1 ██████████ 0s 28ms/step
1/1 ██████████ 0s 42ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 48ms/step
```



```
1/1 ————— 0s 31ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 42ms/step - loss: 0.0308
1/1 ————— 0s 35ms/step - loss: 0.0298
1/1 ————— 0s 30ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 47ms/step
1/1 ————— 0s 44ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 42ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 46ms/step
1/1 ————— 0s 47ms/step - loss: 0.0027
1/1 ————— 0s 52ms/step - loss: 0.0028
1/1 ————— 0s 37ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 45ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 42ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 50ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 37ms/step - loss: 0.0024
1/1 ————— 0s 45ms/step - loss: 0.0025
Epoch: 143/149 | Loss: 0.0025 | Episodes: 512 | Win count: 6 | Win rate: 0.042 | time: 18.75 minutes
1/1 ————— 0s 38ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 45ms/step
1/1 ————— 0s 37ms/step
```

1/1	=====	0s	37ms/step	
1/1	=====	0s	44ms/step	
1/1	=====	0s	45ms/step	
1/1	=====	0s	42ms/step	
1/1	=====	0s	37ms/step	
1/1	=====	0s	35ms/step	
1/1	=====	0s	36ms/step	
1/1	=====	0s	29ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	38ms/step	
1/1	=====	0s	44ms/step	
1/1	=====	0s	38ms/step	
1/1	=====	0s	45ms/step	
1/1	=====	0s	39ms/step	
1/1	=====	0s	47ms/step	- loss: 0.0018
1/1	=====	0s	51ms/step	- loss: 0.0018
1/1	=====	0s	38ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	39ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	35ms/step	
1/1	=====	0s	40ms/step	
1/1	=====	0s	42ms/step	
1/1	=====	0s	45ms/step	
1/1	=====	0s	51ms/step	
1/1	=====	0s	35ms/step	
1/1	=====	0s	52ms/step	
1/1	=====	0s	39ms/step	
1/1	=====	0s	44ms/step	
1/1	=====	0s	47ms/step	
1/1	=====	0s	64ms/step	
1/1	=====	0s	39ms/step	
1/1	=====	0s	46ms/step	
1/1	=====	0s	43ms/step	
1/1	=====	0s	43ms/step	- loss: 0.0024
1/1	=====	0s	52ms/step	- loss: 0.0026
1/1	=====	0s	37ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	36ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	37ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	50ms/step	
1/1	=====	0s	41ms/step	
1/1	=====	0s	36ms/step	
1/1	=====	0s	35ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	44ms/step	
1/1	=====	0s	54ms/step	
1/1	=====	0s	44ms/step	
1/1	=====	0s	38ms/step	

1/1	=====	0s	41ms/step	
1/1	=====	0s	50ms/step	
1/1	=====	0s	41ms/step	
1/1	=====	0s	45ms/step	
1/1	=====	0s	68ms/step	- loss: 0.0052
1/1	=====	0s	53ms/step	- loss: 0.0050
1/1	=====	0s	56ms/step	
1/1	=====	0s	37ms/step	
1/1	=====	0s	39ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	36ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	41ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	38ms/step	
1/1	=====	0s	44ms/step	
1/1	=====	0s	37ms/step	
1/1	=====	0s	35ms/step	
1/1	=====	0s	43ms/step	
1/1	=====	0s	46ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	35ms/step	
1/1	=====	0s	44ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	46ms/step	- loss: 0.0025
1/1	=====	0s	40ms/step	- loss: 0.0025
1/1	=====	0s	36ms/step	
1/1	=====	0s	52ms/step	
1/1	=====	0s	56ms/step	
1/1	=====	0s	44ms/step	
1/1	=====	0s	43ms/step	
1/1	=====	0s	42ms/step	
1/1	=====	0s	36ms/step	
1/1	=====	0s	46ms/step	
1/1	=====	0s	44ms/step	
1/1	=====	0s	30ms/step	
1/1	=====	0s	38ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	39ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	36ms/step	
1/1	=====	0s	45ms/step	
1/1	=====	0s	38ms/step	
1/1	=====	0s	38ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	40ms/step	- loss: 0.0286
1/1	=====	0s	42ms/step	- loss: 0.0281
1/1	=====	0s	45ms/step	
1/1	=====	0s	37ms/step	
1/1	=====	0s	30ms/step	
1/1	=====	0s	36ms/step	
1/1	=====	0s	36ms/step	
1/1	=====	0s	34ms/step	

1/1	0s	37ms/step	
1/1	0s	44ms/step	
1/1	0s	33ms/step	
1/1	0s	38ms/step	
1/1	0s	34ms/step	
1/1	0s	35ms/step	
1/1	0s	33ms/step	
1/1	0s	39ms/step	
1/1	0s	31ms/step	
1/1	0s	41ms/step	
1/1	0s	66ms/step	
1/1	0s	35ms/step	
1/1	0s	42ms/step	
1/1	0s	42ms/step	
1/1	0s	64ms/step	- loss: 0.0026
1/1	0s	39ms/step	- loss: 0.0025
1/1	0s	33ms/step	
1/1	0s	27ms/step	
1/1	0s	31ms/step	
1/1	0s	39ms/step	
1/1	0s	33ms/step	
1/1	0s	39ms/step	
1/1	0s	40ms/step	
1/1	0s	37ms/step	
1/1	0s	39ms/step	
1/1	0s	44ms/step	
1/1	0s	42ms/step	
1/1	0s	36ms/step	
1/1	0s	36ms/step	
1/1	0s	32ms/step	
1/1	0s	42ms/step	
1/1	0s	32ms/step	
1/1	0s	36ms/step	
1/1	0s	37ms/step	
1/1	0s	45ms/step	
1/1	0s	34ms/step	
1/1	0s	38ms/step	- loss: 0.0047
1/1	0s	60ms/step	- loss: 0.0047
1/1	0s	34ms/step	
1/1	0s	31ms/step	
1/1	0s	36ms/step	
1/1	0s	34ms/step	
1/1	0s	33ms/step	
1/1	0s	40ms/step	
1/1	0s	33ms/step	
1/1	0s	36ms/step	
1/1	0s	37ms/step	
1/1	0s	35ms/step	
1/1	0s	33ms/step	
1/1	0s	33ms/step	
1/1	0s	42ms/step	
1/1	0s	31ms/step	
1/1	0s	37ms/step	
1/1	0s	31ms/step	
1/1	0s	39ms/step	
1/1	0s	31ms/step	

```
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 45ms/step
1/1 ██████████ 0s 56ms/step - loss: 0.0045
1/1 ██████████ 0s 39ms/step - loss: 0.0043
Epoch: 144/149 | Loss: 0.0043 | Episodes: 512 | Win count: 6 | Win rate: 0.041 | time: 18.99 minutes
1/1 ██████████ 0s 43ms/step
1/1 ██████████ 0s 40ms/step
1/1 ██████████ 0s 48ms/step
1/1 ██████████ 0s 44ms/step
1/1 ██████████ 0s 41ms/step
1/1 ██████████ 0s 29ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 48ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 46ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 49ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 55ms/step
1/1 ██████████ 0s 48ms/step
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 45ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 35ms/step - loss: 0.0027
1/1 ██████████ 0s 43ms/step - loss: 0.0026
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 40ms/step
1/1 ██████████ 0s 40ms/step
1/1 ██████████ 0s 40ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 40ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 40ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 43ms/step
1/1 ██████████ 0s 46ms/step - loss: 0.0040
1/1 ██████████ 0s 53ms/step - loss: 0.0037
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 35ms/step
```

1/1		0s	45ms/step	
1/1		0s	35ms/step	
1/1		0s	40ms/step	
1/1		0s	38ms/step	
1/1		0s	33ms/step	
1/1		0s	35ms/step	
1/1		0s	33ms/step	
1/1		0s	46ms/step	
1/1		0s	40ms/step	
1/1		0s	37ms/step	
1/1		0s	30ms/step	
1/1		0s	51ms/step	
1/1		0s	34ms/step	
1/1		0s	33ms/step	
1/1		0s	40ms/step	- loss: 0.0032
1/1		0s	43ms/step	- loss: 0.0029
1/1		0s	42ms/step	
1/1		0s	32ms/step	
1/1		0s	34ms/step	
1/1		0s	35ms/step	
1/1		0s	34ms/step	
1/1		0s	42ms/step	
1/1		0s	49ms/step	
1/1		0s	39ms/step	
1/1		0s	34ms/step	
1/1		0s	32ms/step	
1/1		0s	36ms/step	
1/1		0s	40ms/step	
1/1		0s	39ms/step	
1/1		0s	42ms/step	
1/1		0s	44ms/step	
1/1		0s	34ms/step	
1/1		0s	50ms/step	
1/1		0s	33ms/step	
1/1		0s	45ms/step	
1/1		0s	44ms/step	
1/1		0s	37ms/step	- loss: 0.0021
1/1		0s	45ms/step	- loss: 0.0021
1/1		0s	45ms/step	
1/1		0s	31ms/step	
1/1		0s	36ms/step	
1/1		0s	38ms/step	
1/1		0s	46ms/step	
1/1		0s	37ms/step	
1/1		0s	37ms/step	
1/1		0s	33ms/step	
1/1		0s	32ms/step	
1/1		0s	34ms/step	
1/1		0s	29ms/step	
1/1		0s	37ms/step	
1/1		0s	37ms/step	
1/1		0s	28ms/step	
1/1		0s	31ms/step	
1/1		0s	36ms/step	
1/1		0s	46ms/step	
1/1		0s	37ms/step	

```
1/1 ————— 0s 32ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 40ms/step - loss: 0.0019
1/1 ————— 0s 49ms/step - loss: 0.0021
1/1 ————— 0s 33ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 51ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 43ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 48ms/step
1/1 ————— 0s 43ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 43ms/step
1/1 ————— 0s 47ms/step
1/1 ————— 0s 44ms/step
1/1 ————— 0s 45ms/step - loss: 0.0024
1/1 ————— 0s 54ms/step - loss: 0.0026
```

Epoch: 145/149 | Loss: 0.0026 | Episodes: 512 | Win count: 6 | Win rate: 0.041 | time: 19.16 minutes

```
1/1 ————— 0s 44ms/step
1/1 ————— 0s 63ms/step
1/1 ————— 0s 48ms/step
1/1 ————— 0s 43ms/step
1/1 ————— 0s 53ms/step
1/1 ————— 0s 50ms/step
1/1 ————— 0s 55ms/step
1/1 ————— 0s 42ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 42ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 34ms/step - loss: 0.0026
1/1 ————— 0s 34ms/step - loss: 0.0025
1/1 ————— 0s 33ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 38ms/step
```

1/1		0s	34ms/step	
1/1		0s	27ms/step	
1/1		0s	36ms/step	
1/1		0s	36ms/step	
1/1		0s	37ms/step	
1/1		0s	38ms/step	
1/1		0s	41ms/step	
1/1		0s	47ms/step	
1/1		0s	34ms/step	
1/1		0s	34ms/step	
1/1		0s	54ms/step	
1/1		0s	28ms/step	
1/1		0s	32ms/step	
1/1		0s	25ms/step	
1/1		0s	53ms/step	- loss: 0.0020
1/1		0s	34ms/step	- loss: 0.0021
1/1		0s	31ms/step	
1/1		0s	34ms/step	
1/1		0s	45ms/step	
1/1		0s	32ms/step	
1/1		0s	34ms/step	
1/1		0s	36ms/step	
1/1		0s	33ms/step	
1/1		0s	28ms/step	
1/1		0s	50ms/step	
1/1		0s	37ms/step	
1/1		0s	30ms/step	
1/1		0s	44ms/step	
1/1		0s	28ms/step	
1/1		0s	33ms/step	
1/1		0s	38ms/step	
1/1		0s	33ms/step	
1/1		0s	37ms/step	
1/1		0s	29ms/step	
1/1		0s	31ms/step	
1/1		0s	34ms/step	
1/1		0s	40ms/step	- loss: 0.0033
1/1		0s	45ms/step	- loss: 0.0033
1/1		0s	38ms/step	
1/1		0s	34ms/step	
1/1		0s	36ms/step	
1/1		0s	30ms/step	
1/1		0s	40ms/step	
1/1		0s	33ms/step	
1/1		0s	53ms/step	
1/1		0s	40ms/step	
1/1		0s	42ms/step	
1/1		0s	39ms/step	
1/1		0s	34ms/step	
1/1		0s	28ms/step	
1/1		0s	37ms/step	
1/1		0s	43ms/step	
1/1		0s	41ms/step	
1/1		0s	35ms/step	
1/1		0s	34ms/step	
1/1		0s	31ms/step	


```
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 37ms/step - loss: 0.0016
1/1 ██████████ 0s 39ms/step - loss: 0.0016
Epoch: 146/149 | Loss: 0.0016 | Episodes: 512 | Win count: 6 | Win rate: 0.041 | time: 19.28 minutes
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 40ms/step
1/1 ██████████ 0s 39ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 32ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 52ms/step
1/1 ██████████ 0s 44ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 31ms/step
1/1 ██████████ 0s 40ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 27ms/step
1/1 ██████████ 0s 66ms/step - loss: 0.0018
1/1 ██████████ 0s 37ms/step - loss: 0.0018
1/1 ██████████ 0s 45ms/step
1/1 ██████████ 0s 43ms/step
1/1 ██████████ 0s 47ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 51ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 38ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 34ms/step
1/1 ██████████ 0s 36ms/step
1/1 ██████████ 0s 40ms/step
1/1 ██████████ 0s 42ms/step
1/1 ██████████ 0s 43ms/step
1/1 ██████████ 0s 42ms/step
1/1 ██████████ 0s 38ms/step - loss: 0.0018
1/1 ██████████ 0s 37ms/step - loss: 0.0017
1/1 ██████████ 0s 40ms/step
1/1 ██████████ 0s 30ms/step
1/1 ██████████ 0s 37ms/step
1/1 ██████████ 0s 33ms/step
1/1 ██████████ 0s 35ms/step
1/1 ██████████ 0s 40ms/step
```

```
1/1 ————— 0s 38ms/step
1/1 ————— 0s 49ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 42ms/step
1/1 ————— 0s 51ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 34ms/step - loss: 0.0020
1/1 ————— 0s 42ms/step - loss: 0.0020
1/1 ————— 0s 33ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 46ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 42ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 44ms/step - loss: 0.0022
1/1 ————— 0s 55ms/step - loss: 0.0022
Epoch: 147/149 | Loss: 0.0022 | Episodes: 512 | Win count: 6 | Win rate: 0.041 | time: 19.39 minutes
1/1 ————— 0s 36ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 47ms/step
1/1 ————— 0s 46ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 42ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 45ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 36ms/step
```

```
1/1 ————— 0s 34ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 31ms/step - loss: 0.0042
1/1 ————— 0s 30ms/step - loss: 0.0040
1/1 ————— 0s 41ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 48ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 48ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 35ms/step
1/1 ————— 0s 44ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 45ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 48ms/step - loss: 0.0031
1/1 ————— 0s 54ms/step - loss: 0.0029
1/1 ————— 0s 36ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 34ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 45ms/step
1/1 ————— 0s 48ms/step
1/1 ————— 0s 38ms/step
1/1 ————— 0s 39ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 55ms/step
1/1 ————— 0s 46ms/step
1/1 ————— 0s 46ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 43ms/step
1/1 ————— 0s 36ms/step - loss: 0.0025
1/1 ————— 0s 36ms/step - loss: 0.0024
Epoch: 148/149 | Loss: 0.0024 | Episodes: 512 | Win count: 6 | Win rate: 0.040 | time: 19.48 minutes
1/1 ————— 0s 35ms/step
1/1 ————— 0s 57ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 34ms/step
```

1/1	<div></div>	0s	41ms/step	
1/1	<div></div>	0s	36ms/step	
1/1	<div></div>	0s	30ms/step	
1/1	<div></div>	0s	46ms/step	
1/1	<div></div>	0s	35ms/step	
1/1	<div></div>	0s	62ms/step	
1/1	<div></div>	0s	52ms/step	
1/1	<div></div>	0s	33ms/step	
1/1	<div></div>	0s	38ms/step	
1/1	<div></div>	0s	30ms/step	
1/1	<div></div>	0s	39ms/step	
1/1	<div></div>	0s	31ms/step	
1/1	<div></div>	0s	34ms/step	
1/1	<div></div>	0s	31ms/step	
1/1	<div></div>	0s	42ms/step	
1/1	<div></div>	0s	34ms/step	
1/1	<div></div>	0s	42ms/step	- loss: 0.0017
1/1	<div></div>	0s	47ms/step	- loss: 0.0017
1/1	<div></div>	0s	48ms/step	
1/1	<div></div>	0s	36ms/step	
1/1	<div></div>	0s	42ms/step	
1/1	<div></div>	0s	29ms/step	
1/1	<div></div>	0s	34ms/step	
1/1	<div></div>	0s	30ms/step	
1/1	<div></div>	0s	32ms/step	
1/1	<div></div>	0s	34ms/step	
1/1	<div></div>	0s	42ms/step	
1/1	<div></div>	0s	61ms/step	
1/1	<div></div>	0s	39ms/step	
1/1	<div></div>	0s	37ms/step	
1/1	<div></div>	0s	40ms/step	
1/1	<div></div>	0s	50ms/step	
1/1	<div></div>	0s	51ms/step	
1/1	<div></div>	0s	52ms/step	
1/1	<div></div>	0s	58ms/step	
1/1	<div></div>	0s	44ms/step	
1/1	<div></div>	0s	42ms/step	
1/1	<div></div>	0s	42ms/step	
1/1	<div></div>	0s	56ms/step	- loss: 0.0035
1/1	<div></div>	0s	43ms/step	- loss: 0.0030
1/1	<div></div>	0s	39ms/step	
1/1	<div></div>	0s	30ms/step	
1/1	<div></div>	0s	51ms/step	
1/1	<div></div>	0s	35ms/step	
1/1	<div></div>	0s	39ms/step	
1/1	<div></div>	0s	33ms/step	
1/1	<div></div>	0s	31ms/step	
1/1	<div></div>	0s	29ms/step	
1/1	<div></div>	0s	37ms/step	
1/1	<div></div>	0s	49ms/step	
1/1	<div></div>	0s	33ms/step	
1/1	<div></div>	0s	38ms/step	
1/1	<div></div>	0s	39ms/step	
1/1	<div></div>	0s	36ms/step	
1/1	<div></div>	0s	40ms/step	
1/1	<div></div>	0s	41ms/step	

1/1	=====	0s	47ms/step	
1/1	=====	0s	40ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	35ms/step	
1/1	=====	0s	35ms/step	- loss: 0.0031
1/1	=====	0s	36ms/step	- loss: 0.0032
1/1	=====	0s	42ms/step	
1/1	=====	0s	46ms/step	
1/1	=====	0s	52ms/step	
1/1	=====	0s	41ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	30ms/step	
1/1	=====	0s	28ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	29ms/step	
1/1	=====	0s	40ms/step	
1/1	=====	0s	29ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	38ms/step	
1/1	=====	0s	31ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	37ms/step	
1/1	=====	0s	39ms/step	
1/1	=====	0s	35ms/step	- loss: 0.0021
1/1	=====	0s	44ms/step	- loss: 0.0021
1/1	=====	0s	33ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	39ms/step	
1/1	=====	0s	36ms/step	
1/1	=====	0s	37ms/step	
1/1	=====	0s	42ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	39ms/step	
1/1	=====	0s	44ms/step	
1/1	=====	0s	43ms/step	
1/1	=====	0s	41ms/step	
1/1	=====	0s	30ms/step	
1/1	=====	0s	43ms/step	
1/1	=====	0s	32ms/step	
1/1	=====	0s	53ms/step	
1/1	=====	0s	33ms/step	
1/1	=====	0s	52ms/step	
1/1	=====	0s	42ms/step	- loss: 0.0021
1/1	=====	0s	45ms/step	- loss: 0.0022
1/1	=====	0s	36ms/step	
1/1	=====	0s	51ms/step	
1/1	=====	0s	34ms/step	
1/1	=====	0s	41ms/step	
1/1	=====	0s	37ms/step	
1/1	=====	0s	38ms/step	

```
1/1 ————— 0s 48ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 46ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 36ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 41ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 40ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 55ms/step - loss: 0.0032
1/1 ————— 0s 46ms/step - loss: 0.0032
```

Epoch: 149/149 | Loss: 0.0032 | Episodes: 512 | Win count: 6 | Win rate: 0.040 | time: 19.66 minutes

n_epoch: 150, max_mem: 512, data: 32, time: 19.66 minutes

Out[11]: 1179.461493

This cell will check to see if the model passes the completion check. Note: This could take several minutes.

```
In [12]: completion_check(model, qmaze)
         show(qmaze)
```

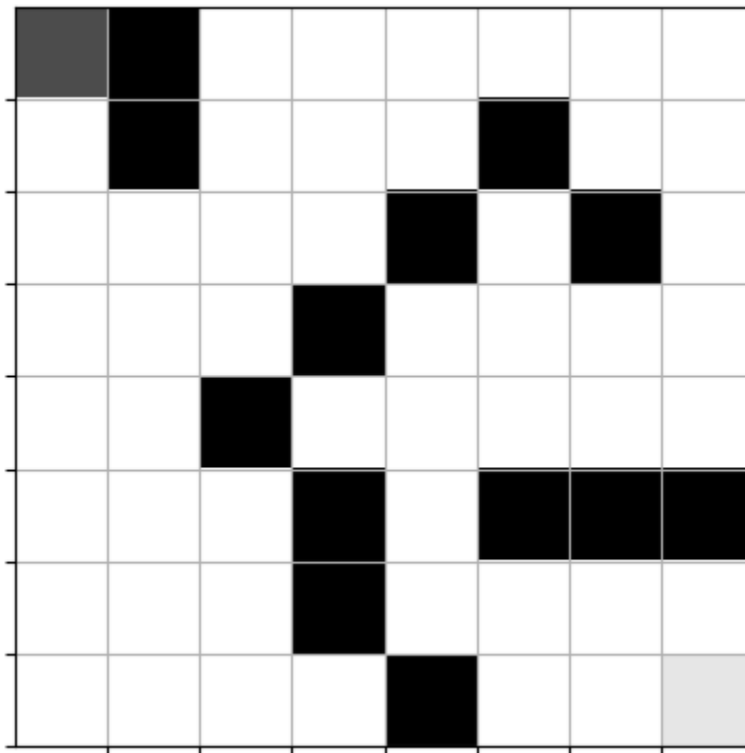
```
1/1 ————— 0s 42ms/step
```

1/1		0s	35ms/step
1/1		0s	30ms/step
1/1		0s	30ms/step
1/1		0s	27ms/step
1/1		0s	34ms/step
1/1		0s	30ms/step
1/1		0s	38ms/step
1/1		0s	28ms/step
1/1		0s	35ms/step
1/1		0s	30ms/step
1/1		0s	29ms/step
1/1		0s	29ms/step
1/1		0s	26ms/step
1/1		0s	27ms/step
1/1		0s	25ms/step
1/1		0s	35ms/step
1/1		0s	33ms/step
1/1		0s	24ms/step
1/1		0s	29ms/step
1/1		0s	25ms/step
1/1		0s	23ms/step
1/1		0s	28ms/step
1/1		0s	28ms/step
1/1		0s	24ms/step
1/1		0s	24ms/step
1/1		0s	27ms/step
1/1		0s	28ms/step
1/1		0s	28ms/step
1/1		0s	27ms/step
1/1		0s	28ms/step
1/1		0s	24ms/step
1/1		0s	30ms/step
1/1		0s	33ms/step
1/1		0s	27ms/step
1/1		0s	30ms/step
1/1		0s	28ms/step
1/1		0s	35ms/step
1/1		0s	26ms/step
1/1		0s	25ms/step
1/1		0s	28ms/step
1/1		0s	44ms/step
1/1		0s	24ms/step
1/1		0s	33ms/step
1/1		0s	30ms/step
1/1		0s	31ms/step
1/1		0s	25ms/step
1/1		0s	26ms/step
1/1		0s	28ms/step
1/1		0s	23ms/step
1/1		0s	26ms/step
1/1		0s	27ms/step
1/1		0s	36ms/step
1/1		0s	29ms/step
1/1		0s	28ms/step
1/1		0s	25ms/step
1/1		0s	31ms/step

1/1	<div></div>	0s	31ms/step
1/1	<div></div>	0s	28ms/step
1/1	<div></div>	0s	25ms/step
1/1	<div></div>	0s	23ms/step
1/1	<div></div>	0s	25ms/step
1/1	<div></div>	0s	28ms/step
1/1	<div></div>	0s	24ms/step
1/1	<div></div>	0s	26ms/step
1/1	<div></div>	0s	26ms/step
1/1	<div></div>	0s	31ms/step
1/1	<div></div>	0s	23ms/step
1/1	<div></div>	0s	24ms/step
1/1	<div></div>	0s	33ms/step
1/1	<div></div>	0s	28ms/step
1/1	<div></div>	0s	25ms/step
1/1	<div></div>	0s	24ms/step
1/1	<div></div>	0s	29ms/step
1/1	<div></div>	0s	22ms/step
1/1	<div></div>	0s	29ms/step
1/1	<div></div>	0s	28ms/step
1/1	<div></div>	0s	26ms/step
1/1	<div></div>	0s	30ms/step
1/1	<div></div>	0s	27ms/step
1/1	<div></div>	0s	28ms/step
1/1	<div></div>	0s	28ms/step
1/1	<div></div>	0s	26ms/step
1/1	<div></div>	0s	25ms/step
1/1	<div></div>	0s	32ms/step
1/1	<div></div>	0s	29ms/step
1/1	<div></div>	0s	25ms/step
1/1	<div></div>	0s	26ms/step
1/1	<div></div>	0s	25ms/step
1/1	<div></div>	0s	26ms/step
1/1	<div></div>	0s	24ms/step
1/1	<div></div>	0s	27ms/step
1/1	<div></div>	0s	25ms/step
1/1	<div></div>	0s	28ms/step
1/1	<div></div>	0s	30ms/step
1/1	<div></div>	0s	28ms/step
1/1	<div></div>	0s	35ms/step
1/1	<div></div>	0s	35ms/step
1/1	<div></div>	0s	29ms/step
1/1	<div></div>	0s	29ms/step
1/1	<div></div>	0s	25ms/step
1/1	<div></div>	0s	25ms/step
1/1	<div></div>	0s	35ms/step
1/1	<div></div>	0s	34ms/step
1/1	<div></div>	0s	27ms/step
1/1	<div></div>	0s	27ms/step
1/1	<div></div>	0s	28ms/step
1/1	<div></div>	0s	24ms/step
1/1	<div></div>	0s	25ms/step
1/1	<div></div>	0s	31ms/step
1/1	<div></div>	0s	30ms/step
1/1	<div></div>	0s	25ms/step
1/1	<div></div>	0s	25ms/step


```
1/1 ————— 0s 29ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 37ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 31ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 27ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 30ms/step
```

```
Out[12]: <matplotlib.image.AxesImage at 0x2af6ce43b30>
```



This cell will test your model for one game. It will start the pirate at the top-left corner and run `play_game`. The agent should find a path from the starting position to the target (treasure). The treasure is located in the bottom-right corner.

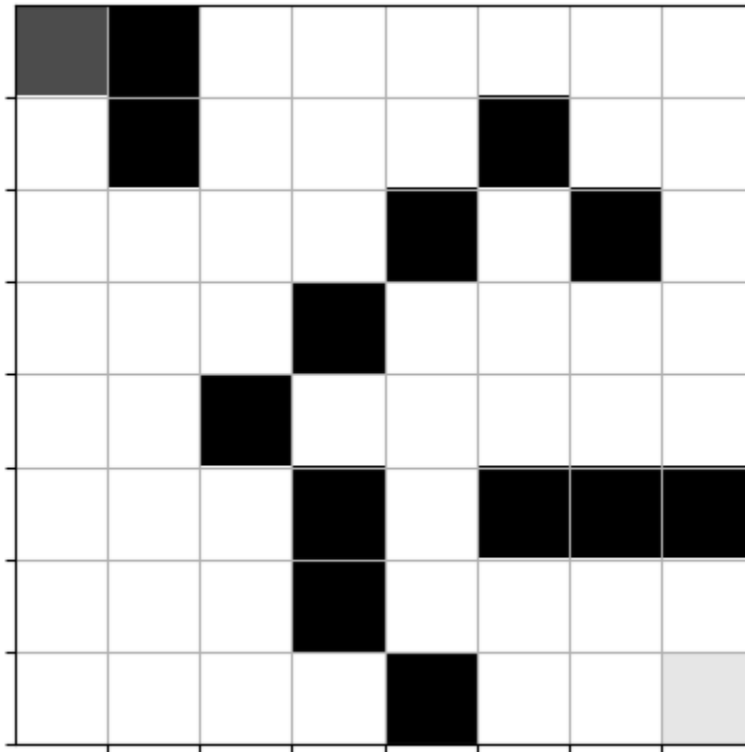
```
In [13]: pirate_start = (0, 0)
play_game(model, qmaze, pirate_start)
show(qmaze)
```

1/1		0s	32ms/step
1/1		0s	33ms/step
1/1		0s	25ms/step
1/1		0s	36ms/step
1/1		0s	46ms/step
1/1		0s	33ms/step
1/1		0s	31ms/step
1/1		0s	45ms/step
1/1		0s	41ms/step
1/1		0s	31ms/step
1/1		0s	31ms/step
1/1		0s	28ms/step
1/1		0s	29ms/step
1/1		0s	27ms/step
1/1		0s	30ms/step
1/1		0s	28ms/step
1/1		0s	27ms/step
1/1		0s	29ms/step
1/1		0s	26ms/step
1/1		0s	32ms/step
1/1		0s	33ms/step
1/1		0s	26ms/step
1/1		0s	25ms/step
1/1		0s	37ms/step
1/1		0s	31ms/step
1/1		0s	29ms/step
1/1		0s	23ms/step
1/1		0s	27ms/step
1/1		0s	29ms/step
1/1		0s	24ms/step
1/1		0s	28ms/step
1/1		0s	28ms/step
1/1		0s	28ms/step
1/1		0s	26ms/step
1/1		0s	24ms/step
1/1		0s	35ms/step
1/1		0s	26ms/step
1/1		0s	29ms/step
1/1		0s	28ms/step
1/1		0s	31ms/step
1/1		0s	24ms/step
1/1		0s	26ms/step
1/1		0s	27ms/step
1/1		0s	35ms/step
1/1		0s	26ms/step
1/1		0s	31ms/step
1/1		0s	28ms/step
1/1		0s	30ms/step
1/1		0s	35ms/step
1/1		0s	38ms/step
1/1		0s	36ms/step
1/1		0s	25ms/step
1/1		0s	28ms/step
1/1		0s	33ms/step
1/1		0s	27ms/step
1/1		0s	27ms/step

1/1	<div></div>	0s	26ms/step
1/1	<div></div>	0s	30ms/step
1/1	<div></div>	0s	30ms/step
1/1	<div></div>	0s	28ms/step
1/1	<div></div>	0s	29ms/step
1/1	<div></div>	0s	26ms/step
1/1	<div></div>	0s	33ms/step
1/1	<div></div>	0s	32ms/step
1/1	<div></div>	0s	31ms/step
1/1	<div></div>	0s	24ms/step
1/1	<div></div>	0s	32ms/step
1/1	<div></div>	0s	30ms/step
1/1	<div></div>	0s	32ms/step
1/1	<div></div>	0s	28ms/step
1/1	<div></div>	0s	28ms/step
1/1	<div></div>	0s	30ms/step
1/1	<div></div>	0s	24ms/step
1/1	<div></div>	0s	24ms/step
1/1	<div></div>	0s	26ms/step
1/1	<div></div>	0s	31ms/step
1/1	<div></div>	0s	35ms/step
1/1	<div></div>	0s	26ms/step
1/1	<div></div>	0s	27ms/step
1/1	<div></div>	0s	26ms/step
1/1	<div></div>	0s	27ms/step
1/1	<div></div>	0s	29ms/step
1/1	<div></div>	0s	32ms/step
1/1	<div></div>	0s	34ms/step
1/1	<div></div>	0s	30ms/step
1/1	<div></div>	0s	33ms/step
1/1	<div></div>	0s	35ms/step
1/1	<div></div>	0s	29ms/step
1/1	<div></div>	0s	27ms/step
1/1	<div></div>	0s	25ms/step
1/1	<div></div>	0s	30ms/step
1/1	<div></div>	0s	28ms/step
1/1	<div></div>	0s	27ms/step
1/1	<div></div>	0s	28ms/step
1/1	<div></div>	0s	27ms/step
1/1	<div></div>	0s	30ms/step
1/1	<div></div>	0s	30ms/step
1/1	<div></div>	0s	23ms/step
1/1	<div></div>	0s	26ms/step
1/1	<div></div>	0s	27ms/step
1/1	<div></div>	0s	29ms/step
1/1	<div></div>	0s	31ms/step
1/1	<div></div>	0s	32ms/step
1/1	<div></div>	0s	27ms/step
1/1	<div></div>	0s	27ms/step
1/1	<div></div>	0s	26ms/step
1/1	<div></div>	0s	28ms/step
1/1	<div></div>	0s	27ms/step
1/1	<div></div>	0s	30ms/step
1/1	<div></div>	0s	29ms/step
1/1	<div></div>	0s	26ms/step
1/1	<div></div>	0s	31ms/step

```
1/1 ————— 0s 34ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 33ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 29ms/step
1/1 ————— 0s 26ms/step
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1/1 ————— 0s 33ms/step
1/1 ————— 0s 25ms/step
1/1 ————— 0s 26ms/step
1/1 ————— 0s 30ms/step
1/1 ————— 0s 28ms/step
1/1 ————— 0s 32ms/step
1/1 ————— 0s 24ms/step
1/1 ————— 0s 30ms/step
```

```
Out[13]: <matplotlib.image.AxesImage at 0x2af67fa2b10>
```



Save and Submit Your Work

After you have finished creating the code for your notebook, save your work. Make sure that your notebook contains your name in the filename (e.g. Doe_Jane_ProjectTwo.ipynb). This will help your instructor access and grade your work easily. Download a copy of your IPYNB file and submit it to Brightspace. Refer to the Jupyter Notebook in Apporto Tutorial if you need help with these tasks.