Python 3.12.4 (tags/v3.12.4:8e8a4ba, Jun 6 2024, 19:30:16) [MSC v.1940 64 bit (AMD64)] on win32

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= RESTART: C:\Users\DELL\Desktop\AI\_TRADING\_PROJECT\Project\Lần

2\Alpha\_Zero\_Trading\_Final\Run+Train.py

X\_train shape: (6592, 400, 19)
X\_test shape: (1648, 400, 19)

y\_train shape: (6592,)
y\_test shape: (1648,)
WARNING:tensorflow:From

C:\Users\DELL\AppData\Local\Programs\Python\Python312\Lib\site-packages\keras\src\ba
ckend\tensorflow\core.py:192: The name tf.placeholder is deprecated. Please use

tf.compat.v1.placeholder instead.

Model: "functional\_8"

| Layer (type)                              | Output Shape     | Param # |
|---|------------------|---------|
| input_layer (InputLayer)                  | (None, 400, 19)  | 0       |
| conv1d (Conv1D)                           | (None, 400, 128) | 7,424   |
| dropout (Dropout)                         | (None, 400, 128) | 0       |
| conv1d_1 (Conv1D)                         | (None, 400, 64)  | 24,640  |
| dropout_1 (Dropout)                       | (None, 400, 64)  | 0       |
| conv1d_2 (Conv1D)                         | (None, 400, 32)  | 6,176   |
| dropout_2 (Dropout)                       | (None, 400, 32)  | 0       |
| conv1d_3 (Conv1D)                         | (None, 400, 16)  | 1,552   |
| dropout_3 (Dropout)                       | (None, 400, 16)  | 0       |
| add (Add)                                 | (None, 400, 16)  | 0       |
| transformer_block<br>(TransformerBlock)   | (None, 400, 16)  | 34,144  |
| transformer_block_1<br>(TransformerBlock) | (None, 400, 16)  | 34,144  |
| transformer_block_2<br>(TransformerBlock) | (None, 400, 16)  | 34,144  |
| transformer_block_3 (TransformerBlock)    | (None, 400, 16)  | 34,144  |

| transformer_block_4 (TransformerBlock)    | (None, 400, 16) | 34,144  |
|---|-----------------|---------|
| transformer_block_5<br>(TransformerBlock) | (None, 400, 16) | 34,144  |
| transformer_block_6<br>(TransformerBlock) | (None, 400, 16) | 34,144  |
| transformer_block_7<br>(TransformerBlock) | (None, 400, 16) | 34,144  |
| flatten (Flatten)                         | (None, 6400)    | 0       |
| dense_16 (Dense)                          | (None, 64)      | 409,664 |
| dense_17 (Dense)                          | (None, 1)       | 65      |

Total params: 722,673 (2.76 MB)
Trainable params: 722,673 (2.76 MB)
Non-trainable params: 0 (0.00 B)

Epoch 1/100

```
[[1m 1/206][0m ][37m-
                     -[[0m [[1m3:56:27][0m 69s/step - loss: 1.0317
[] 1m 2/206 [] 0m [] 37m
                     -[][0m [][1m20:02[][0m 6s/step - loss: 64.3373 -
[][1m  3/206][0m][37m-
                     -[[0m [[1m18:58][0m 6s/step - loss: 77.1109 -
[] 1m  4/206 [] 0m  [] 37m
                     -[[0m [[1m18:07][0m 5s/step - loss: 77.9256 -
[][1m 5/206][0m ][37m-
-[0m [[1m17:10][0m 5s/step - loss: 71.7061 -
[[1m 6/206][0m ][37m-
-[Om [[1m16:50][Om 5s/step - loss: 68.2112 -
[][1m 7/206][0m][37m-
[][1m 8/206][0m ][37m-
                     [[1m 9/206][0m ][37m-
                     -[[0m [[1m16:20][0m 5s/step - loss: 61.8133 -
[[1m 10/206][0m ][37m-
                     -[Om [[1m16:18][Om 5s/step - loss: 59.0130 -
[ ]1m 11/206 [ ]0m [ ]32m-[ ]0m [ ]37m- ]
                         -0[0m 0[1m16:090[0m 5s/step - loss:
[[1m 12/206][0m ][32m-][0m][37m-
                         -[[0m [[1m16:02][0m 5s/step - loss:
[]1m 13/206][0m][32m-][0m][37m-]
                         -[[0m [[1m15:52][0m 5s/step - loss:
```

```
[[1m 14/206][0m ][32m-][0m][37m--
                          -0[0m 0[1m15:450[0m 5s/step - loss:
-[[0m [[1m15:39][0m 5s/step - loss:
[[1m 15/206][0m ][32m-][0m][37m-
-[Om [[1m15:32[[Om 5s/step - loss:
[[1m 16/206][0m ][32m-][0m][37m-
[[1m 17/206][0m ][32m-][0m][37m-
                          ·[[0m [[1m15:37][0m 5s/step - loss:
[[1m 18/206][0m ][32m-][0m][37m-
                          -0[0m 0[1m15:350[0m 5s/step - loss:
[[1m 19/206][0m ][32m-][0m][37m-
                          -0[0m 0[1m15:300[0m 5s/step - loss:
[]1m 20/206[]0m []32m-[]0m[]37m-
                          -0[0m 0[1m15:270[0m 5s/step - loss:
[[1m 21/206][0m ][32m--][0m][37m-
                          -[[0m [[1m15:32][0m 5s/step - loss:
[[1m 22/206][0m ][32m--][0m][37m-
                          -0[0m 0[1m15:350[0m 5s/step - loss:
[[1m 23/206][0m ][32m-][0m][37m-
                          -0[0m 0[1m15:340[0m 5s/step - loss:
[[1m 24/206][0m ][32m--][0m][37m-
                          -[[0m [[1m15:33][0m 5s/step - loss:
```