

Installed pre requisites, numpy, matplotlib, pandas, tensorflow, scikit-learn, pandas-datareader, yfinance.

Set up pycharm project running python 3.11,

Successfully ran V0.1

```
Epoch 24/25
38/38 [=====] - 2s 41ms/step - loss: 0.0033
Epoch 25/25
38/38 [=====] - 2s 42ms/step - loss: 0.0033
40/40 [=====] - 2s 14ms/step
1/1 [=====] - 0s 28ms/step
Prediction: [[27.05541]]

Process finished with exit code 0
```



Downloaded and trained (P1), running 50 epoch to save on runtime.

```
Epoch 49: val_loss did not improve from 0.00029
82/82 [=====] - 24s 293ms/step - loss: 5.5895e-04 - mean_absolute_error: 0.0183 - val_loss: 3.2490e-04 - val_mean_absolute_error: 0.0136
Epoch 50/50
82/82 [=====] - ETA: 0s - loss: 5.5418e-04 - mean_absolute_error: 0.0186
Epoch 50: val_loss did not improve from 0.00029
82/82 [=====] - 26s 314ms/step - loss: 5.5418e-04 - mean_absolute_error: 0.0186 - val_loss: 3.0417e-04 - val_mean_absolute_error: 0.0122

Process finished with exit code 0
```

Sample of training data created

	A	B	C	D	E	F	G	H
1		open	high	low	close	adjclose	volume	ticker
2	15/05/1997	0.121875	0.125	0.096354	0.097917	0.097917	1.44E+09	AMZN
3	16/05/1997	0.098438	0.098958	0.085417	0.086458	0.086458	2.94E+08	AMZN
4	19/05/1997	0.088021	0.088542	0.08125	0.085417	0.085417	1.22E+08	AMZN
5	20/05/1997	0.086458	0.0875	0.081771	0.081771	0.081771	1.09E+08	AMZN
6	21/05/1997	0.081771	0.082292	0.06875	0.071354	0.071354	3.77E+08	AMZN
7	22/05/1997	0.071875	0.072396	0.065625	0.069792	0.069792	2.36E+08	AMZN
8	23/05/1997	0.070313	0.076042	0.066667	0.075	0.075	3.19E+08	AMZN
9	27/05/1997	0.075521	0.082292	0.072917	0.079167	0.079167	1.74E+08	AMZN
10	28/05/1997	0.08125	0.081771	0.076563	0.076563	0.076563	91488000	AMZN
11	29/05/1997	0.077083	0.077083	0.073958	0.07526	0.07526	69456000	AMZN
12	30/05/1997	0.075	0.075521	0.073958	0.075	0.075	51888000	AMZN
13	2/06/1997	0.075521	0.076563	0.075	0.075521	0.075521	11832000	AMZN
14	3/06/1997	0.076563	0.076563	0.073958	0.073958	0.073958	23664000	AMZN
15	4/06/1997	0.073958	0.074479	0.069792	0.070833	0.070833	61608000	AMZN
16	5/06/1997	0.070833	0.077083	0.06875	0.077083	0.077083	1.13E+08	AMZN
17	6/06/1997	0.075781	0.085417	0.075521	0.082813	0.082813	1.56E+08	AMZN
18	9/06/1997	0.082813	0.085417	0.082813	0.084375	0.084375	47040000	AMZN
19	10/06/1997	0.085417	0.085417	0.076563	0.079167	0.079167	1.09E+08	AMZN
20	11/06/1997	0.079688	0.080208	0.076563	0.077083	0.077083	23760000	AMZN
21	12/06/1997	0.079167	0.082292	0.077604	0.080208	0.080208	32640000	AMZN
22	13/06/1997	0.08125	0.08125	0.079167	0.079167	0.079167	13872000	AMZN
23	16/06/1997	0.080208	0.080208	0.078125	0.078646	0.078646	18264000	AMZN
24	17/06/1997	0.079948	0.079948	0.07474	0.07526	0.07526	94128000	AMZN
25	18/06/1997	0.076042	0.076823	0.075	0.075521	0.075521	49296000	AMZN
26	19/06/1997	0.075521	0.076563	0.075	0.075521	0.075521	20064000	AMZN
27	20/06/1997	0.076563	0.077604	0.075	0.076302	0.076302	67752000	AMZN
28	23/06/1997	0.077083	0.077083	0.073958	0.075	0.075	20952000	AMZN
29	24/06/1997	0.07526	0.076302	0.073958	0.075521	0.075521	15024000	AMZN
30	25/06/1997	0.076302	0.076302	0.074479	0.075521	0.075521	42120000	AMZN
31	26/06/1997	0.076042	0.076042	0.07526	0.075521	0.075521	63792000	AMZN
32	27/06/1997	0.075781	0.075781	0.073958	0.074479	0.074479	23760000	AMZN
33	30/06/1997	0.075521	0.079948	0.073958	0.077083	0.077083	54936000	AMZN
34	1/07/1997	0.077083	0.077083	0.075521	0.075781	0.075781	25848000	AMZN

P1 test results

```

Future price after 15 days is 141.19$
huber_loss loss: 0.0002938502293545753
Mean Absolute Error: 2.1129442621219265
Accuracy score: 0.5821237585943468
Total buy profit: 586.4737012386322
Total sell profit: 15.807205319404549
Total profit: 602.2809065580368
Profit per trade: 0.46010764442936347

```

	open	high	...	buy_profit	sell_profit
2023-05-10	108.099998	110.669998	...	12.579994	0.0
2023-05-18	116.690002	118.599998	...	5.279999	0.0
2023-05-23	114.269997	117.139999	...	11.430000	0.0
2023-05-25	116.629997	116.870003	...	10.489998	0.0
2023-06-02	124.919998	126.389999	...	3.080002	0.0
2023-06-12	124.019997	126.779999	...	3.810005	0.0
2023-06-16	127.709999	127.900002	...	3.290001	0.0
2023-06-21	125.639999	126.730003	...	9.470001	0.0
2023-07-07	128.589996	130.970001	...	2.430008	0.0
2023-07-20	134.070007	134.789993	...	8.599991	0.0

```

[10 rows x 11 columns]

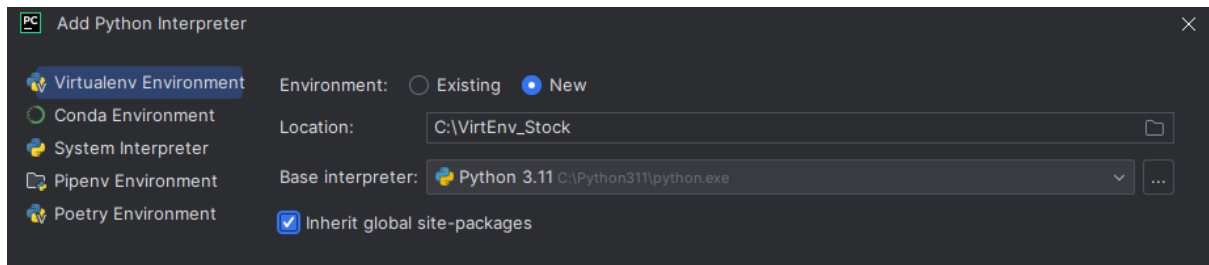
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Creating virtualenv

<https://www.jetbrains.com/help/pycharm/creating-virtual-environment.html>

followed this guide

base interpreter and empty directory. Pycharm does the rest of the setup



New interpreter being the virtual environment created above.

